AGREEMENT BETWEEN
THE CITY OF SAN MARCOS AND
PROFESSIONAL FIRM
CONTRACT NUMBER 224-042

This Agreement is made by and between the Owner, City of San Marcos, Texas ("CITY"), and Freese and Nichols, Inc., San Marcos, Texas, ("Professional Firm"), and is effective for all purposes as of the date of the last signature to this Agreement ("Effective Date").

The Owner: The City of San Marcos, Texas

and

The Professional Firm ("Firm"): Freese and Nichols, Inc., San Marcos, Texas

for

The Project: 224-042 On-Call Wastewater Planning and Improvements

Owner Standard Terms and Conditions: Parties have read and agree to be bound by the Standard Terms and Conditions, when not in conflict with the terms of this Agreement, found at sanmarcostx.gov/StandardTermsandConditions.

Further;

The Owner and the Professional Firm agree as follows:

ARTICLE 1
PROFESSIONAL FIRM'S SERVICES

Professional Firm agrees to perform the services specifically described in **Exhibit 1** and all other professional services reasonably inferable from **Exhibit 1** and necessary for complete performance of Firm's obligations under this Agreement (collectively, "**Services**"). To the extent of any conflict between the terms in **Exhibit 1** and this Agreement, the terms of this Agreement shall prevail.

ARTICLE 2
PROFESSIONAL FIRM'S RESPONSIBILITIES

Professional Firm agrees to perform services with the professional skill and care ordinarily provided by competent engineers or architects practicing in the same or similar locality and under the same or similar circumstances and professional license and as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect. The Firm shall at all times provide sufficient personnel to accomplish Services in a timely manner. The Firm shall manage its services, administer the Project and coordinate other professional services as necessary for the complete performance of its' obligations under this Agreement.

Professional Firm agrees to perform Services in compliance with all applicable national, federal, state, municipal, and State of Texas laws, regulations, codes, ordinances, orders and with those of any other body having jurisdiction over the Project.

The Firm's Services shall be reasonably accurate and free from material errors or omissions. The Firm shall promptly correct any known or discovered error, omission, or other defect in the plans, drawings, specifications, or other services provided by the Firm without any additional cost or expense to Owner.

The Firm shall designate a representative primarily responsible for Firm's Services under this Agreement. The designated representative shall act on behalf of Firm with respect to all phases of Professional Services and shall

be available as required for the benefit of the Project and Owner. The designated representative shall not be changed without prior approval of the Owner, which approval shall not be unreasonably withheld.

The Firm shall carry such professional liability and errors and omissions insurance, covering the services provided under this Agreement, with a minimum limit of $1,000,000 each claim and $1,000,000 aggregate. The fees for such insurance will be at the expense of the Professional Firm. The Firm shall deliver a Certificate of Insurance indicating the expiration date, and existence, of the Firm's professional liability insurance before commencement or continuation of performance of the services under this Agreement.

On-Call Professional Services. The Professional Firm will perform assigned services as described in **Exhibit "5"**, On-Call Agreement Fund Allocation Request Form. The Fund Allocation Request Form serves to "assign" specific project related scopes of services and establishes the price for such services within the overall Master Agreement.

ARTICLE 3
THE OWNER'S RESPONSIBILITIES

The Owner shall provide the Professional Firm with a full description of the requirements of the Project.

The Owner shall furnish surveys, geotechnical reports or other special investigations of the Project site as requested by the Professional Firm and as reasonably necessary for the completion of Professional Firm's Services. The Owner shall furnish structural, mechanical, chemical and other laboratory tests as reasonably required.

The Owner will review the drawings, specifications and other documents of service produced by Professional Firm in the performance of its obligations under this Agreement (collectively the "Design Documents") as required. Owner will notify Firm of any design fault or defect in Services or Design Documents of which Owner becomes aware.

The Owner shall furnish required information and services and shall render approvals and decisions as expeditiously as necessary for the orderly progress of Professional Services.

The Owner designates Marcus Naiser, P.E., as its representatives authorized to act in the Owner's behalf with respect to the Project. The contact information for Owner's representative is listed below:

Marcus Naiser, Assistant Director of CIP
630 East Hopkins Street
San Marcos, Texas 78666
Ph.: 512-393-8376
E-mail: MNaiser@sanmarcostx.gov

Fund Allocation Request Form. As required, the Owner will issue specific project related scopes of services assignments utilizing the Fund Allocation Request Form, **Exhibit "5."** The issuance of assigned services via the Fund Allocation Request Form shall be binding and in compliance with the terms of this Agreement.

ARTICLE 4
OWNERSHIP AND USE OF DOCUMENTS

The Design Documents prepared by Professional Firm as instruments of service are and shall remain the property of the Firm whether the Project for which they are created is executed or not. However, the Owner shall be permitted to retain copies, including reproducible copies, of the Design Documents for information and reference in connection with the Owner's use and occupancy of the Project. In addition, Owner shall have an irrevocable, paid-up, perpetual license and right, which shall survive the termination of this Agreement, to use the Design Documents and the ideas and designs contained in them for any purpose, with or without participation of the Professional Firm.

ARTICLE 5
DISPUTE RESOLUTION

If a dispute arises out of or relates to the Agreement or these Terms and Conditions, or a breach thereof, the parties agree to negotiate prior to prosecuting a suit for damages. However, this section does not prohibit the filing of a lawsuit to toll the running of a statute of limitations or to seek injunctive relief. Either party may make a written request for a meeting within fourteen (14) calendar days after receipt of the request or such later period as agreed by the parties. Each party shall include, at a minimum, one (1) senior level individual with decision-making authority regarding the dispute. The purpose of this and any subsequent meeting is to attempt in good faith to negotiate a resolution of the dispute. If, within thirty (30) calendar days after such meeting, the parties have not succeeded in negotiating a resolution of the dispute, they will proceed directly to mediation as described below. Negotiation may be waived by a written agreement signed by both parties, in which event the parties may proceed directly to mediation as described below.

If the efforts to resolve the dispute through negotiation fail, or the parties waive the negotiation process, the parties may select, within thirty (30) calendar days, a mediator trained in mediation skills to assist with resolution of the dispute. Should they choose this option, the Owner and the Firm agree to act in good faith in the selection of the mediator and give consideration to qualified individuals nominated to act as mediator. Nothing in the Contract prevents the parties from relying on the skills of a person who is trained in the subject matter of the dispute or a contract interpretation expert. The parties agree to participate in mediation in good faith for up to thirty (30) calendar days from the date of the first mediation session. The Owner and Firm will share the mediator's fees equally and the parties will bear their own costs of participation such as fees for any consultants or attorneys they may utilize to represent them or otherwise assist them in the mediation.

ARTICLE 6
PROJECT TERMINATION OR SUSPENSION

This Agreement may be terminated by either party upon seven days written notice should the other party fail substantially to perform in accordance with its terms through no fault of the terminating party and such failure is not fully cured in the seven (7) calendar days' notice period. This Agreement may be terminated by the Owner's City Manager or City Manager's Designee for any reason upon fifteen (15) calendar days' written notice to the Firm.

In the event of termination through no fault of the Firm, the Firm shall be equitably compensated for all Professional Services performed and Reimbursable Expenses incurred prior to termination in accordance with this Agreement.

ARTICLE 7
MISCELLANEOUS PROVISIONS

Entire Agreement. This Agreement supersedes all prior agreements, written or oral, between the Firm and Owner and constitutes the entire and integrated Agreement and understanding between the parties with respect to the subject matter of the Agreement. This Agreement may only be amended by a written instrument signed by both parties.

Assignment. This Agreement is a personal service contract for the services of Professional Firm, and Professional Firm's interest in this Agreement, duties hereunder and/or fees due hereunder may not be assigned or delegated to a third party.

Applicable Law. The Agreement will be governed by and construed under the laws of the State of Texas. Any controversy, claim or dispute arising out of or relating to this Agreement will be brought in a state court of competent jurisdiction in Hays County or, if in federal court, in the Federal Western District of Texas, Austin Division for trial.

Waiver. A delay or omission by either party in exercising any right or power under the Agreement shall not be construed as a waiver of that right or power. A waiver by either party of any term or condition of the Agreement shall not be construed as a waiver of any subsequent breach of that term or condition or of any other term or condition of the Agreement.

Severability. If any provision of this Agreement is determined to be invalid or unenforceable in any respect, that determination shall not affect any other provision of this Agreement which shall be interpreted as if the invalid or unenforceable provision had not been included.

Independent Contractor. Professional Firm recognizes that it is engaged as an independent contractor and acknowledges that Owner shall have no responsibility to provide Professional Firm or its employees with any benefits normally associated with employee status. The Firm will neither hold itself out as nor claim to be an officer, partner, employee or agent of Owner.

Family Code Child Support Certification. If State funds are being used in in the procurement of the services described in Exhibit A, pursuant to Section 231.006, Texas Family Code, Professional Firm certifies that it is not ineligible to receive the award of or payments under this Agreement and acknowledges that this Agreement may be terminated and payment may be withheld if this certification is inaccurate.

Prohibition on Contracts with Companies Boycotting Israel. Pursuant to Chapter 2270 and 808, Texas Government Code, the Firm certifies that is not ineligible to receive the award of or payments under the Agreement and acknowledges that the Agreement may be terminated, and payment may be withheld if this certification is inaccurate. Failure to meet or maintain the requirements under this provision will be considered a material breach.

Section 2252 Compliance. Section 2252 of the Texas Government Code restricts the Owner from contracting with companies that do business with Iran, Sudan, or a foreign terrorist organization. The Firm hereby certifies that is not ineligible to receive the award of or payments under this Agreement. Failure to meet or maintain the requirements under this provision will be considered a material breach.

Prohibition on Contracts with Certain Foreign-Owned Companies. Section 2274 of the Texas Government Code (SB2116) restricts the City from contracting with companies that do business with certain foreign-owned companies in connection with critical infrastructure if the company is granted direct or remote access; and if the company is owned by citizens of or is directly controlled by the government of China, Iran, North Korea, Russia, or a "designated country", or headquartered in China, Iran, North Korea, Russia, or a designated country. Designated country is Governor-designated country as a threat to critical infrastructure. By signing below as an authorized signer, the Bidder hereby certifies that it does not do business with certain foreign-owned companies in connection with critical infrastructure as described herein. Failure to maintain the requirements under this provision will be considered a material breach.

Prohibition on Contracts with Companies that Discriminate Against Firearm and Ammunition Industries. Section 2274 of the Texas Government Code (SB19) restricts the City from contracting with companies that discriminate against firearm and ammunition industries. By signing below as an authorized signer, the Bidder certifies that it does not have a practice, policy, guidance, or directive that discriminates against a firearm entity or firearm trade association; and will not discriminate against the same during the term of this contract. (Only applies to companies with 10 or more full-time employees and for a contract value greater than $100,000.) Failure to maintain the requirements under this provision will be considered a material breach.

Prohibition on Contracts with Companies Boycotting Certain Energy Companies. Section 2274 of the Texas Government Code (SB13) restricts the City from contracting with companies that boycott energy companies. By signing below as an authorized signer, the Bidder certifies that it does not have a practice, policy, guidance, or directive boycotting energy companies, and will not discriminate against the same during the term of this contract. (Only applies to companies with 10 or more full-time employees and for a contract value greater than $100,000.) Failure to maintain the requirements under this provision will be considered a material breach.

Non-Discrimination. The Firm understands and certifies that it is an Equal Opportunity Employer and does not and will not discriminate in employment and in subcontracts based on race, color, sexual orientation, gender identity, national origin, sex, age, disability or economic condition and prohibits retaliation, discharge, or discrimination against any employee or applicant for employment or against any subcontractor or supplier.

Proprietary Interests. All information owned, possessed or used by Owner which is communicated to, learned, developed or otherwise acquired by Professional Firm in the performance of services for Owner, which is not generally

known to the public, shall be confidential and Professional Firm shall not disclose any such confidential information, unless required by law. The Firm shall not announce or advertise its engagement by Owner in connection with the Project or publicly release any information regarding the Project without the prior written approval of Owner.

Termination Due to Loss of Funding. If Owner funds are utilized to fund any part of this Agreement, the Firm understands that those Owner funds for the payment for work performed by the Firm under this Agreement have been provided through the Owner's budget approved by Owner Council for the current fiscal year only. State statutes prohibit the obligation and expenditure of public funds beyond the fiscal year for which a budget has been approved. The Owner cannot guarantee the availability of funds and enters into this Agreement only to the extent such funds are made available. The Firm acknowledges and agrees that it will have no recourse against the Owner for its failure to appropriate funds for the purposes of this Agreement in any fiscal year other than the year in which this Agreement was executed. The fiscal year for the Owner extends from October 1st of each calendar year to September 30th of the following calendar year.

Ethics Matters; No Financial Interest. Firm and its employees, agents, representatives, and subcontractors have read and understand Owner's Ethics Policy available at http://www.sanmarcostx.gov/380/Ethics, and applicable state ethics laws and rules. Neither Professional Firm nor its employees, agents, representatives or subcontractors will assist or cause Owner employees to violate Owner's Conflicts of Interest Policy, provisions described by Owner's Standards of Conduct Guide, or applicable state ethics laws or rules. Professional Firm represents and warrants that no member of the City Council of San Marcos has a direct or indirect financial interest in the transaction that is the subject of this Agreement.

Subcontracting. The Professional Firm will not subcontract any work under this Agreement without prior written approval from the Owner. In the event approval is given by the Owner, the Professional Firm will specify any work or services, the appropriate insurance requirements and miscellaneous provisions by separate written agreement with the subcontractor.

Mutual Waiver of Consequential Damages. In no event shall either party be liable, whether in contract or tort or otherwise, to the other party for loss of profits, delay damages, or for any special incidental or consequential loss or damage of any nature arising at any time or from any cause whatsoever.

Texas Tax Code 171.1011(g)(3). Notwithstanding anything in this agreement and for the purpose of complying with Texas Tax Code 171.1011(g)(3), the City agrees to the following:

(1) Prior to commencing performance under this Agreement, Firm will provide the City with a list of proposed subconsultants, subcontractors, or agents to be used in Professional Firm's services under this Agreement. The City shall have the right to accept or reject the use of any subconsultant, subcontractor, or agent on the Professional Firm's list. Such acceptance or rejection shall be given within a commercially reasonable time from the date the Professional Firm delivers it, and;
(2) Any payment made by the Owner to the Firm that includes fees payable to a subconsultant, subcontractor or agent of Professional Firm under this Agreement shall constitute an acceptance by the Owner of Firm's use of any such subconsultant, subcontractor or agent of the Firm under this Agreement.

Limitation of Liability. In recognition of the relative risks and benefits of the Agreement to both the Owner and the Firm, to the fullest extent permitted under applicable law, Owner agrees that the Firm's total liability for any and all claims, losses, costs, damages, or expenses including, without limitation, reasonable attorneys' fees and costs, of any nature whatsoever, shall not exceed the Professional Firm's total fee under the Agreement. It is intended that this limitation of liability shall apply to any and all liability or cause of action, whether in contract, warranty, tort, or otherwise, however alleged or arising.

Force Majeure. Professional Firm shall have no liability for any delay caused by an event of force majeure, the Owner or any of its consultant's or contractors, or circumstances outside of its reasonable control.

Termination for Convenience. The Owner's City Manager or the City Manager's designee may terminate the Agreement at any time upon thirty (30) calendar days' notice in writing to the Firm. Upon receipt of such notice, the Firm

shall, unless the notice directs otherwise, discontinue all services in connection with the performance of the Agreement. As soon as practicable after the receipt of notice of termination, Professional Firm shall submit a statement to the appropriate department(s) showing in detail the services performed or items delivered under the Agreement to date of termination. The Owner agrees to compensate the Firm for that portion of the prescribed charges for which the services were actually performed or items delivered under the Agreement and not previously paid.

Notices. All notices referenced in this Agreement shall be provided in writing. Notices shall be deemed effective when delivered by hand delivery or on the third business day after the notice is deposited in the U.S. Mail. Notices shall be sent to the following addresses:

If to Owner:	The City of San Marcos 630 East Hopkins Street San Marcos, Texas 78666 Attn: City Purchasing Manager's Office cosmpurchasing@sanmarcostx.gov
With Copies to:	The City of San Marcos 630 East Hopkins Street San Marcos, Texas 78666 Attn: City Attorney's Office LegalInfo@sanmarcostx.gov
If to Professional Firm	Freese and Nichols, Inc. Charles Kurcherka, P.E. 1251 Sadler Drive, Building One, Suite 1150 San Marcos, Texas 78666 cak@freese.com

The parties may designate alternative persons or addresses for receipt of notices by written notice.

Changes in Service. If a Party requires a change or amendment to this Agreement or its Exhibits, the Parties agree to use the Authorization of Change in Services Form in **Exhibit 4** to do so. The Authorization of Change in Services Form must be agreed to and signed by both Parties before any change to this Agreement is effective.

ARTICLE 8
REIMBURSABLE EXPENSES

Reimbursable Expenses are in addition to Compensation for the Firm's Services and include actual and reasonable expenses incurred by the Firm, that are (i) outside the services listed in **Exhibit 1**; and (ii) solely and directly in connection with the performance of Professional Firm's Services. Such Reimbursable Expenses must be approved in writing by the Owner and may include the following:

Expense of transportation (coach class air travel only) and living expenses in connection with out-of-state travel as directed and approved in advance by the Owner. Transportation and living expenses incurred within the State of Texas are not reimbursable unless expressly approved by the Owner in advance.

Fees paid for securing approval of authorities having jurisdiction over the Project.

Professional models and renderings if requested by the Owner.

Reproductions, printing, binding, collating and handling of reports, and drawings and specifications or other project-related work product, other than that used solely in-house for the Firm.

Shipping or mailing of all reports, drawings, specifications, and other items in connection with the Project.

Expense of any additional insurance coverage or limits, excluding professional liability and errors and omissions insurance, required under this Agreement or requested by the Owner that is in excess of that normally carried by the Firm.

ARTICLE 9
ADDITIONAL SERVICES

Additional Services are services not included in the Professional Firm's Services and not reasonably inferable from its Services. Additional Services shall be provided only if authorized or confirmed in writing by the Owner. Prior to commencing any Additional Service, Professional Firm shall prepare for acceptance by the Owner an Additional Services Proposal detailing the scope of the Additional Services and the proposed fee for those services. Professional Firm shall proceed to perform Additional Services only after written acceptance of the Additional Services Proposal by Owner.

Upon acceptance by Owner, each Additional Services Proposal and the services performed by the Firm pursuant to such Additional Services Proposal shall become part of this Agreement and shall be subject to all the terms and conditions of this Agreement.

ARTICLE 10
PAYMENTS TO PROFESSIONAL FIRM

The Firm shall present monthly Payment Requisitions to the Owner detailing the Firm's Services and approved Additional Services performed and the approved Reimbursable Expenses incurred for the Project in the previous month. With each application for payment, Firm shall submit payroll information, receipts, invoices and any other evidence of payment which Owner or its designated representatives shall deem necessary to support the amount requested.

Owner shall promptly review the Payment Requisition and notify Professional Firm whether the Payment Request is approved or disapproved, in whole or in part. Owner shall promptly pay Professional Firm for all approved services and expenses. For purposes of Texas Government Code § 2251.021(a)(2), the date performance of services is completed is the date when the Owner's representative approves the Payment Requisition.

Owner shall have the right to withhold from payments due the Firm such sums as are necessary to protect Owner against any loss or damage which may result from negligence by Professional Firm or failure of the Firm to perform its obligations under this Agreement.

ARTICLE 11
PROFESSIONAL FIRM'S ACCOUNTING RECORDS

Records of the Firm costs, reimbursable expenses pertaining to the Project and payments shall be available to Owner or its authorized representative during business hours and shall be retained for three (3) years after final Payment or abandonment of the Project, unless Owner otherwise instructs Professional Firm in writing. The Firm's records shall be kept on the basis of generally accepted accounting principles.

ARTICLE 12
INSURANCE

For services performed on Owner's premises, Professional Firm shall furnish to Owner Certificates of Insurance as set forth below prior to the commencement of any work hereunder and shall maintain such coverage during the full term of the Agreement. On the Certificate of Insurance, name the **City of San Marcos, Purchasing & Contracting Division, 630 East Hopkins Street, San Marcos, Texas 78666** as an additional insured.

Worker's Compensation	Statutory Limits
Employer's Liability	$1,000,000 each occurrence
	$1,000,000 aggregate
Comprehensive General Liability	$1,000,000 each occurrence
	$1,000,000 aggregate

Comprehensive Auto Liability	$1,000,000 each person
Bodily Injury	$1,000,000 each occurrence
Property Damage	$1,000,000 each occurrence
Professional Liability	$1,000,000 each occurrence and aggregate

The Firm shall include the Owner as an additional insured on the General Liability policy, and the Worker's Compensation policy shall include a waiver of subrogation in favor of the Owner.

Required insurance shall not be cancelable without thirty (30) days' prior written notice to Owner.

Upon request, the Firm shall furnish complete sets of its insurance policies to Owner for review. If additional insurance or changes to this article are required, they shall be explicitly laid out in **Exhibit 1**.

ARTICLE 13
INDEMNITY

THE FIRM SHALL HOLD OWNER, THE CITY OF SAN MARCOS, AND ITS CITY COUNCIL, OFFICERS, AGENTS AND EMPLOYEES HARMLESS AND FREE FROM ANY LOSS, DAMAGE OR EXPENSE TO THE EXTENT THAT THE LOSS, DAMAGE OR EXPENSE IS CAUSED BY OR RESULTS FROM AN ACT OF NEGLIGENCE, INTENTIONAL TORT, INTELLECTUAL PROPERTY INFRINGEMENT, OR FAILURE TO PAY A SUBCONTRACTOR OR SUPPLIER COMMITTED BY THE INDEMNITOR OR THE INDEMNITOR'S AGENT, CONSULTANT UNDER CONTRACT, OR ANOTHER ENTITY OVER WHICH THE INDEMNITOR EXERCISES CONTROL.

ARTICLE 14
COMPENSATION

The Professional Firm's compensation for Professional Services shall be as follows:

Service Fees: The maximum fee for Professional Services shall not exceed **Two Million, Five Hundred Ninety-Five Thousand, Eight Hundred Seventy-One dollars ($2,595,871.00)** as approved by the Owner set forth in **Exhibit 2**.

Reimbursable Expenses: For Reimbursable Expenses approved by the Owner (ref. Article 8 and **Exhibit 2**), Professional Firm shall be compensated for the actual expense incurred by the Firm. Notwithstanding the foregoing, Owner's payment to the Firm for Reimbursable Expenses will not exceed a maximum of amount agreed upon in this Agreement and Exhibits without the prior written approval of the Owner.

Additional Services: The Firm's Compensation for any approved Additional Services shall be as described in the Additional Services Proposal accepted by the Owner.

ARTICLE 15
TERM OF CONTRACT

Duration: The term of this On-Call Agreement will be for **four (4)** years from the established Effective Date. No additional work assignments through the Fund Allocation Request Form can be issued after this date; however, all assignments made prior to the expiration date, and which have not been completed, can be completed.

The Owner and the Professional Firm have entered into this Agreement as of the Effective Date.

OWNER:	**PROFESSIONAL FIRM:**
THE CITY OF SAN MARCOS	**FREESE AND NICHOLS, INC.**
By: _____	By: _____
Name: _____	Name: Kendall King, PE
Title: _____	Title: Vice President
Date: _____	Date: December 21, 2023

Exhibits:

EXHIBIT 1 – Scope of Services and Deliverables

EXHIBIT 2 – Detailed Fee Schedule

EXHIBIT 3 – Project Schedule

EXHIBIT 4 – Authorization of Change in Service Form

EXHIBIT 5 – On-Call Agreement Fund Allocation Request Form

Exhibit 1

CITY OF SAN MARCOS LS 24 UPGRADES AND PACKAGE WASTEWATER TREATMENT PLANT
SCOPE OF SERVICES

PROJECT UNDERSTANDING

Freese and Nichols, Inc. (FNI) will provide engineering services for the City of San Marcos (City) related to the planning, feasibility evaluation, and preliminary engineering of wastewater collection and conveyance facilities and design, bid and construction phase services for the Cottonwood Creek Subdivision Lift Station (LS 24) Upgrades and Package Wastewater Treatment Plant (WWTP) Project.

The Scope of Services pertains to the following facilities:

1. Preliminary feasibility, route analyses, and preliminary engineering of a new 36" Gravity Interceptor in two segments:
    A. From the existing Cottonwood Lift Station (LS 51) to LS 24
    B. From LS 24 to the new WWTP
2. Capacity expansion of Cottonwood Creek Subdivision Lift Station (LS 24) from a firm pumping capacity of 1.3 million gallons per day (MGD) to an assumed firm capacity of 2.9 MGD.
3. Temporary Package WWTP to serve early phases of development while the permanent WWTP is under design/construction. The temporary Package WWTP is expected to be in service through 2027. The permanent WWTP is anticipated to be delivered using a Progressive Design Build (PDB) contract at a later date. FNI will endeavor to meet the proposed design schedule and provide permitting services in a timely manner to achieve this goal. However, the City recognizes that permitting, equipment delivery and construction schedules are beyond the control of FNI and could impact the timeliness of the Package WWTP project schedule.

General Assumptions:

2. Lift Station 24 Upgrades:
    A. LS 24 existing firm capacity of 1.3 MGD to be expanded to 2.9 MGD. FNI to verify proposed capacity within this scope of services, see Flow Projections and Hydraulic Analysis section.
    B. FNI to evaluate capacity of existing LS 24 discharge force main to LS 51. The existing force main is assumed to be 12 inches in diameter. Design for increased force main capacity/force main replacement is not included in this scope of services. If projected flows in existing force main from LS 24 to LS 51 do not meet the requirements of the Texas Commission on Environmental Quality (TCEQ), FNI will submit a variance to the TCEQ upon the City's request.
    C. FNI to evaluate existing LS conditions and design for potential reuse/replacement of lift station pumps and electrical equipment. It is assumed that the existing hatch sizes, etc. are adequate for the new pumps and no structural improvements on wet well will be required to fit the proposed pumps.
    D. Upgrade any electrical equipment to meet new power demand, as needed. Evaluate use of City owned generator for this site.
    E. FNI to provide structural details to accommodate new electrical equipment, including generator and transformer pads, and panel pavilion.

3. Future Gravity Interceptor:

   A. Preliminary design of 36" Gravity Interceptor to be evaluated in two segments: from LS 51 to near LS 24, and from LS 24 to the new WWTP, including preliminary design of the gravity main tangent required to decommission LS 24. Proposed easement limits to be shown on gravity interceptor schematic exhibits. Gravity main design and construction is not included in the scope of this project.

   B. Preliminary alignment design of the gravity interceptor from LS 51 to the new WWTP to include a fiber optic conduit. Conduit design and construction is not included in this scope.

4. Temporary Package WWTP and Influent Lift Station (ILS):

   A. Package WWTP shall be a vendor provided, factory built, field assembled, complete treatment system utilizing conventional activated sludge or membrane bioreactor process to treat domestic wastewater generated by residential development. Vendor will be selected based on the proposed process design and the package system will be procured based on a performance specification. The final design capacity of the WWTP will be determined based on projections provided to the City by the developers but is expected to be between 0.20 MGD and 0.5 MGD average daily flow. The WWTP will be designed with as much turn-down capability as practical to accommodate very low flow from the early stage of development. It is assumed flows below the minimum turn-down capacity will be pumped and hauled to the City's existing WWTP. Package WWTP vendor shall be responsible for design of all tankage, equipment, piping, electrical power distribution, instrumentation and controls within the battery limits of the Package WWTP, battery limits being the connection points for influent raw wastewater and effluent treated water pipelines, and electrical power supply to the vendor supplied MCC. The design and construction of an odor control system is not anticipated with the Package WWTP.

   B. The discharge point for the Package WWTP is assumed to be at the unnamed tributary crossing the SE corner of the WWTP site. This Scope of Services includes a flood and erosion analysis of the unnamed tributary from the outfall point to the confluence with Cottonwood Creek. If the analysis determines the tributary to be unsuitable, design of improvements to the tributary or of an outfall pipeline to Cottonwood Creek is not included in this Scope of Services and would be an additional service.

   C. The Influent lift station (ILS) for the Package WWTP shall be designed to serve the maximum design flow of the Package WWTP plus peaking factor. ILS will be a concrete manhole at a location that allows the connection of incoming wastewater interceptors with stub-out pipeline that can be extended to the future ILS for the permanent WWTP with minimal interruption of the operation of the temporary ILS and Package WWTP.

   D. FNI will coordinate with the electrical utility to provide new service for the ILS and Package WWTP. Coordination with the electrical utility will include a general discussion of the future permanent WWTP, but detailed load estimates will only be developed for the ILS and Package WWTP.

   E. Package WWTP is anticipated to include all required electrical switchgear, motor controls and instrumentation in a factory assembled weatherproof enclosure. Design of an electrical building for the Package WWTP is not included in this scope of services.

   F. ILS design to include rack-mounted electrical with an awning. Design of an electrical building is not included in this scope of services.

G. ILS to be supplied with connections for a portable genset provided by the City to provide standby power for the Package WWTP at design flow conditions.

H. A portable, modular building will be provided to serve as office space for the Package WWTP. Modification of the building for use as office/lab space will be by City. Design of office/lab facilities by FNI are Additional Services.

I. Access to the site will be provided via an all-weather, flex base roadway. Permanent site paving and access layout, design and construction will be provided with the permanent WWTP project.

J. No landscaping will be required at the Package WWTP site other than the required vegetation establishment.

5. TPDES Permitting

   A. Package WWTP will be permitted under the existing TPDES discharge permit held by the Developer for the Fleming Farms development and procured by the Developer. TPDES permit for the Permanent WWTP will be handled separately by the OA and/or the PDB team. FNI shall coordinate with the Developer to support the permitting effort by supplying information on the Package WWTP and related engineering data for inclusion in the Developer's permit modification application to TCEQ.

6. Project design, bid and construction to be split into two separate bid packages as follows:

   A. Bid Package 1 to consist of upgrades to LS 24, containing the following project phases: 30% Design, 90% Design, 100% Design, Bid, Construction, Record Drawings.

   B. Bid Package 2 to consist of Package WWTP and ILS, containing the following project phases: 30% Design, 90% Design, 100% Design, Bid, Construction, Record Drawings.

7. FNI will provide the scope of services for any geotechnical engineering and the City will procure a qualified firm to provide the geotechnical engineering services. Geotechnical engineering for the permanent WWTP is not included in this scope of services.

8. FNI will provide the scope of services for any required project Subsurface Utility Engineering (SUE) and the City will procure a qualified firm to provide the SUE services. SUE for the permanent WWTP is not included in this scope of services.

9. The City will coordinate and secure right-of-entry for survey and provide property acquisition services.

10. FNI will coordinate with Bluebonnet Electric Cooperative (BBEC) to provide power to the Package WWTP. Coordination of the permanent WWTP's power needs is not included in this scope of services.

11. LiDAR data or similar surface data will be used for topography in preliminary engineering of 36" gravity interceptor.

12. A traffic control plan (TCP) will not be provided by FNI. If required, TCP will be provided by construction contractor(s).

13. Improvements to Lift Station 51 are not included in this scope of services.

14. A Phase I Environmental Site Assessment will not be performed as part of this scope.

15. US Army Corps of Engineers (USACE) authorization for the project will be covered with Nationwide Permit (NWP 58) for Utility Line Activities for Water and Other Substances, and the project will not require a Pre-Construction Notification (PCN).

ARTICLE I

BASIC SERVICES: FNI shall render the following professional services in connection with the development of the Project:

1. PROJECT MANAGEMENT: FNI shall provide professional services in this phase as follows:
   A. Project Setup and Accounting: FNI will setup the project in FNI's accounting software and monitor it on a monthly basis.
   B. Prepare subconsultant agreements.
   C. Quality Assurance (QA)/Quality Control (QC): FNI will develop and implement a QA/QC plan for the project.
   D. Baseline Schedule – City will provide a schedule template at the start of the project. FNI will update for the duration of the project and provide schedule updates to the City.
   E. Project Planning and Monitoring – An internal project execution plan and quality assurance plan will be prepared at the beginning of the project.
   F. Status Reporting/Invoicing – FNI will provide monthly status reports, summarizing current budget and schedule status, along with outstanding contracting issues. The status report will be attached to a monthly invoice and submitted to the City.
   G. Project Team Coordination – FNI will direct and coordinate FNI and Subconsultant staff for initiation of contracts, completion of required tasks, deliverables, scheduling, and QA/QC management.
   H. Coordination with Permanent WWTP Project – FNI will coordinate with the City, Owner's Advisor (OA), and Progressive Design-Build (PDB) contractor for the permanent WWTP regarding the following:
      1) Package WWTP layout, phasing/timing, and schedule.
      2) Environmental review for WWTP site, with limits indicated on Attachment D.
      3) Drainage improvements for Package WWTP as required to obtain a City permit for the facility. Drainage improvements required for the permanent WWTP outside of the requirements of the Package WWTP design are not included in this scope of services.
   I. Meetings:
      1) Conduct Project Kickoff Meeting with City Staff and Internal Kickoff Meeting: Purpose of this meeting is to identify project team members, establish project communications protocols, confirm project goals and objectives, review scope, schedule and budget, and coordinate initial project tasks. FNI will prepare and distribute a kickoff meeting agenda prior to the meeting and prepare and distribute meeting minutes following meeting.
      2) Project Status Meeting: During the design of the project, team will meet monthly with the City via video conference. FNI will prepare the meeting agenda and meeting minutes following the meetings. (maximum of 12 meetings)

3) Permanent WWTP Coordination Meetings: During the design of the project, FNI will meet with the OA and PDB team via video conference for coordination of the lift station with the plant design. (maximum of 6 meetings)

4) Miscellaneous stakeholder meetings with Developers, etc. (maximum of 4 meetings)

5) LS 24 Pump Evaluation: Attend one (1) site visit with City staff to run pumps and obtain pressure and flow data to verify current pump flow and develop friction factor for existing lift station force main.

6) Site Visits: Up to three (3) visits for data collection and product coordination.

7) Coordination with Bluebonnet Electric Cooperative: Up to four (4) meetings to coordinate electrical service for the LS 24 upgrade and Package WWTP and ILS.

J. Deliverables:

1) Monthly 1-Page Reports

2) Project schedule

2. Flow Projections and Hydraulic Analysis: FNI shall provide professional services in this phase as follows:

A. FNI will calculate projected flows and the scheduling/timing of proposed developments to be served by the WWTP. Using the hydraulic model developed during the ongoing Wastewater Master Plan, FNI will evaluate the capacity and determine the improvement triggers of the existing wastewater collection system, including LS 24, LS 51, the pertinent gravity mains upstream of both facilities, and the existing WWTP. FNI will also develop a template to update schedule/timing as development plans are updated, including the capacity triggers of LS 24, LS 51, pertinent gravity mains, and the existing WWTP, relating to the following assumed phasing:

1) Phase 1: LS 24 is upgraded to expand capacity to support additional proposed flow from ongoing and proposed developments. Proposed developments will be served by the gravity infrastructure upstream of LS 24 where feasible.

2) Phase 2: Temporary Package WWTP is placed in service at the permanent WWTP site to extend wastewater service to proposed developments. LS 24 will continue to serve proposed developments under the expanded configuration in Phase 1.

3) Phase 3: Permanent WWTP is commissioned. The section of 36” gravity interceptor is constructed from LS 24 to the permanent WWTP. LS 24 is decommissioned and flow is routed to the new WWTP, alleviating flows at LS 51 and the existing WWTP. The timing of this phase is contingent upon the capacity evaluation of the existing WWTP and LS 51.

4) Phase 4: New 36” gravity interceptor is constructed from LS 51 to LS 24 and is connected to gravity interceptor constructed for Phase 3. Once the interceptor is in service, LS 51 is decommissioned and flow is routed to the new WWTP, alleviating flows at the existing WWTP. The timing of this phase is also contingent on the results of capacity evaluation of the existing WWTP and LS 51.

B. Deliverables

1) Draft and Final Technical Memorandum

3. PRELIMINARY ENGINEERING: FNI shall provide professional services in this phase as follows:

   A. LS 24 Upgrades - Prepare and Submit Technical Memorandum to address the following:

      1) Existing and proposed flow conditions

      2) Preliminary pump sizing and force main hydraulics

      3) Preliminary site electrical improvements

      4) Preliminary Opinion of Probable Construction Costs (OPCC)

   B. Receiving Stream Assessment (Unnamed Tributary) – Prepare and submit Technical Memorandum to address the following:

      1) Collect LiDAR data, readily available hydraulic and hydrologic models, land use data and soil type data for the drainage area.
      2) Field visit to collect information on the tributary's current geomorphic stability and its ability to remain stable under increased effluent discharge conditions.
      3) Model the existing discharge in the tributary for the discharges specified in the City's drainage criteria manual.
      4) Determine the existing floodplain widths in the tributary.
      5) Measure the change in floodplain widths with the increase in discharge.
      6) Characterize the existing geomorphic stability of the tributary, provide exhibits showing erosion sensitive locations under increased discharge from WWTP effluent at peak flow conditions.

   C. Package WWTP and ILS - Prepare and Submit Technical Memorandum to address the following:

      1) Design Basis – Based on projected flows from Task 2, anticipated TPDES discharge permit limits and estimated influent wastewater characteristics developed from previous Site Analysis Study, develop the design basis for the Package WWTP.

      2) Package Treatment Plant alternative assessment – Coordinate with up to three package wastewater treatment system vendors to identify feasible Package WWTP alternatives considering:

         a. Process technology

         b. Land area requirements

         c. Potential for phased installation

         d. Suitability to meet anticipated discharge limits

         e. Operational flexibility including turn-down capability

         f. Capital and O&M costs

         g. Availability/lead time

         h. Lease/purchase terms

         i. Potential for beneficial use in permanent WWTP

      3) Preliminary Process Flow Diagram

      4) Preliminary Package WWTP site layout

      5) Preliminary estimated electrical loads

6) Package WWTP Influent Lift Station – wet well sizing, preliminary pump sizing and force main hydraulics

7) Preliminary OPCC

D. 36" Cottonwood Gravity Interceptor – Prepare and Submit Technical Memorandum to address the following:

1) Evaluate gravity interceptor connection to LS 51 based on record drawings

2) Evaluate up to two (2) alignments for the 36" gravity main, using LiDAR data or similar surface data for topography, and include number of parcels per route and easements required

3) Develop schematic exhibits in the form of a roll plot or large-scale sheets identifying pipe alignments, including a profile of alignment options to show feasibility

4) Make preliminary alignment recommendation

5) Preliminary OPCC

E. Deliverables

1) LS 24 Upgrades Draft and Final Technical Memorandum

2) 36" Gravity Interceptor Draft and Final Technical Memorandum

3) Receiving Stream Assessment Technical Memorandum

4) Package WWTP Design Basis Technical Memorandum

4. <u>30% DESIGN PHASE – LS 24 Upgrades (Bid Package 1):</u> FNI shall provide professional services in this phase as follows:

A. Project phase will be in accordance with Attachment A – Engineering Scope of Services Checklist. Project plans will be in accordance with Attachment B – Engineering/CIP Plan Review Checklist.

B. Meetings/Site Visits

1) Project site visit for survey coordination, maximum of 1

2) Attend 30% design review meeting with the City

C. Deliverables

Submittal will be in accordance with Attachment A – Engineering Scope of Services Checklist, Attachment B – Engineering/CIP Plan Review Checklist and Attachment C – GIS Submittal Checklist.

5. <u>90% DESIGN PHASE – LS 24 Upgrades (Bid Package 1):</u> FNI shall provide professional services in this phase as follows:

A. Project plans for this phase will include: general site drawings, civil drawings, structural drawings, mechanical and electrical drawings. Contract documents and project specifications will be provided during this phase. Division 0 and Division 1 Specifications to be provided by the City.

B. Meetings/Site Visits

1) Attend 90% design review meeting with the City

C. Deliverables

Deliverables will be in accordance with Attachment A – Engineering Scope of Services Checklist. Project plans will be in accordance with Attachment B – Engineering/CIP Plan Review Checklist.

6. 100% DESIGN PHASE – LS 24 Upgrades (Bid Package 1): FNI shall provide professional services in this phase as follows:

   A. After City review of 90% complete submittal, FNI will issue complete signed and sealed drawings, issued for bid and agency review. FNI will provide engineering reports, plans, and required documentation required for applicable agency review, including the TCEQ and other agencies.

   B. Deliverables

   Deliverables will be in accordance with Attachment A – Engineering Scope of Services Checklist. Project plans will be in accordance with Attachment B – Engineering/CIP Plan Review Checklist.

7. BID PHASE – LS 24 Upgrades (Bid Package 1): Upon completion of the design services and approval of 100% drawings and specifications by City, FNI shall provide professional services in this phase as follows:

   A. Assist City by responding to questions and interpreting bid documents. Prepare and issue addenda to the bid documents to plan holders if necessary.

   B. At City request, FNI will assist City in opening, tabulating, and analyzing the bids received. Review the qualification information provided by the apparent low bidder to determine if, based on the information available, they appear to be qualified to construct the project. Recommend award of contracts or other actions as appropriate to be taken by City. Pre-qualification of all prospective bidders and issuing a list of eligible bidders prior to the bid opening is an additional service.

   C. Assist the City in conducting a pre-bid conference for the construction projects and coordinate responses with City. Response to the pre-bid conference will be in the form of addenda issued after the conference. Attend the tour of the project site after the pre-bid conference.

   D. Assist City in the preparation of Construction Contract Documents for construction contracts. Provide one (1) set of Construction Contract Documents to the City which include information from the apparent low bidders bid documents, legal documents, and addenda bound in the documents for execution by the City and construction contractor.

   E. No hard copies of the plans and specifications will be provided to the contractor.

   F. Deliverables

      1) Addendum(s), as required.

      2) Contractor reference verification documentation

      3) Recommendation of Award Letter

      4) Documentation in accordance with Attachment C – GIS Submittal Checklist

      5) Conformed Construction Plans in accordance with Attachment A – Engineering Scope of Services Checklist.

8. CONSTRUCTION PHASE GENERAL REPRESENTATION – LS 24 Upgrades (Bid Package 1): Upon completion of the bid or negotiation phase services, FNI will proceed with the performance of construction phase general representation services as described below.

   In performing these services, it is understood that FNI does not guarantee the Contractor's performance, nor is FNI responsible for the supervision of the Contractor's operation and employees. FNI shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor, or any safety precautions and programs relating in any way to the condition of the premises, the work of the Contractor or any Subcontractor. FNI shall not be responsible for the acts or omissions of any person (except its own employees or agents) at the Project site or otherwise performing any of the work of the Project.

   The City agrees to include provisions in the General Conditions that require Contractor to include FNI: (1) as an additional insured and in any waiver of subrogation rights with respect to such liability insurance purchased and maintained by Contractor for the Project (except workers' compensation and professional liability policies); and (2) as an indemnified party in the Contractor's indemnification provisions where the City is named as an indemnified party.

   A. Assist City in conducting preconstruction conference with the Contractor, review construction schedules prepared by the Contractor pursuant to the requirements of the construction contract and prepare a proposed estimate of monthly cash requirements of the Project from information provided by the Construction Contractor.

   B. Establish communication procedures with the City and Contractor. Submit monthly reports of construction progress. Reports will describe construction progress in general terms and summarize project costs, construction schedule and pending and approved contract modifications.

   C. Establish and maintain a project documentation system consistent with the requirements of the construction contract documents. Monitor the processing of contractor's submittals and provide for filing and retrieval of project documentation. Produce monthly reports indicating the status of all submittals in the review process. Review contractor's submittals, including, requests for information, modification requests, shop drawings, schedules, and other submittals in accordance with the requirements of the construction contract documents for the projects. Monitor the progress of the contractor in sending and processing submittals to see that documentation is being processed in accordance with schedules.

   D. Based on FNI's observations as an experienced and qualified design professional and review of the Payment Requests and supporting documentation submitted by Contractor, determine the amount that FNI recommends Contractor be paid on monthly and final estimates, pursuant to the General Conditions of the Construction Contract.

   E. Construction Site Visits

      1) Attend up to four (4) biweekly construction progress meetings via Microsoft Teams.

      2) Attend up to two (2) visits to the project site to coordinate with the Contractor and City as required to discuss challenges during construction.

      3) Attend up to two (2) miscellaneous project review and coordination meetings.

      4) Attend up to two (2) site visits to inspect project for substantial completion and prepare a list of deficiencies to be corrected by the contractor before accepting the project as substantially complete.

5) Conduct, in company with City's representative, a final review of the Project for conformance with the design concept of the Project and general compliance with the Construction Contract Documents. Prepare a list of deficiencies to be corrected by the contractor before recommendation of final payment. Assist the City in obtaining legal releases, permits, warranties, spare parts, and keys from the contractor. Review and comment on the certificate of completion and the recommendation for final payment to the Contractor(s). Visiting the site to review completed work in excess of two (2) trips are an Additional Service.

6) Attend one (1) testing and start-up meeting.

7) Attend one (1) site visit prior to the expiration of the project warranty period and prepare a list of deficiencies to be corrected by the contractor.

F. Notify the City of non-conforming work observed on site visits. Review quality related documents provided by the contractor such as test reports, equipment installation reports or other documentation required by the Construction contract documents.

G. Work with Contractor to coordinate the work of testing laboratories and inspection bureaus required for the testing or inspection of materials, witnessed tests, factory testing, etc. for quality control of the Project. The cost of such quality control shall be paid by City and is not included in the services to be performed by FNI.

H. Interpret the drawings and specifications for City and Contractor(s). Investigations, analyses, and studies requested by the Contractor(s) and approved by City, for substitutions of equipment and/or materials or deviations from the drawings and specifications is an additional service.

I. Establish procedures for administering constructive changes to the construction contracts. Process contract modifications and negotiate with the contractor on behalf of the City to determine the cost and time impacts of these changes. Prepare change order documentation for approved changes for execution by the City. Documentation of field orders, where cost to City is not impacted, will also be prepared. Investigations, analyses, studies, or design for substitutions of equipment or materials, corrections of defective or deficient work of the contractor or other deviations from the construction contract documents requested by the contractor and approved by the City are an additional service. Substitutions of materials or equipment or design modifications requested by the City are an additional service.

J. Prepare documentation for contract modifications required to implement modifications in the design of the project. Receive and evaluate notices of contractor claims and make recommendations to the City on the merit and value of the claim on the basis of information submitted by the contractor or available in project documentation. Endeavor to negotiate a settlement value with the Contractor on behalf of the City if appropriate. Providing these services to review or evaluate construction contractor(s) claim(s), supported by causes not within the control of FNI are an additional service.

9. <u>RECORD DRAWING PHASE – LS 24 Upgrades (Bid Package 1):</u> Upon completion of the construction phase services, FNI will proceed with the performance of record phase services as described below:

A. Record drawing survey will be performed in accordance with Special Services Item No. 2.

B. Project plans will be updated with survey data from post-construction survey and as-built drawings provided by the Contractor documenting changes during construction.

C. Deliverables

Deliverables for this phase will be in accordance with Attachment A – Engineering Scope of Services Checklist and Attachment C – GIS Submittal Checklist.

10. DESIGN PHASE - Package WWTP (Bid Package 2): FNI shall provide professional services in this phase as follows:

    A. Package WWTP Area Drainage Design

    FNI will develop the drainage and Erosion and Sedimentation (E&S) control design for the Package WWTP and downstream infrastructure. FNI will perform a hydrologic impact analysis to verify that the increase in impervious cover associated with the Package WWTP will not result in any adverse impacts downstream of the site. If required, developing flood mitigation needs will be an additional service. The drainage design will include the following:

    1) Obtain available GIS data for use in the hydrologic analysis.
    2) Utilize the most recent hydrologic and hydraulic models provided by the City for Cottonwood Creek.
    3) Develop pre-project and project conditions drainage basins intersecting the site.
    4) Calculate the time of concentration for each basin.
    5) Delineate the pre-project and project conditions impervious cover within each basin and calculate the runoff curve numbers for each basin.
    6) Perform a hydrologic analysis using the SCS Curve Number methodology to calculate peak flow rates at the site.
    7) Compare the pre-project conditions peak flow rates with the project conditions peak flow rates at each point discharging from the site as well as at the outfall into Cottonwood Creek to determine if any mitigation will be required.
    8) Perform a hydraulic analysis to size the required drainage infrastructure downstream of the site to convey site flows to Cottonwood Creek (if needed). It is assumed that flow from the site will be conveyed to Cottonwood Creek via open channel.
    9) Preform water quality calculations to preliminarily size required mitigation improvements.

11. 30% DESIGN PHASE - Package WWTP (Bid Package 2): FNI shall provide professional services in this phase as follows:

    A. Project phase will be in accordance with Attachment A – Engineering Scope of Services Checklist. Project plans will be in accordance with Attachment B – Engineering/CIP Plan Review Checklist.

    B. Prepare performance specification and bid documents for a factory built, Package WWTP system for City's use in soliciting competitive proposals from Package WWTP suppliers including minimum performance requirements and standards for construction materials, motors, electrical and instrumentation. Performance specifications shall be coordinated with perspective proposers in an effort to maintain the opportunity for multiple vendors to submit responsive proposals. It is anticipated that the bid process for the Package WWTP system will be conducted by the City's purchasing department and that the successful proposer will be specified in the construction contract documents as "pre-selected equipment" for installation by the construction contractor. Bid documents shall be coordinated with the front-end construction documents to clearly define scope of supply and coordination requirements between the Package WWTP supplier and contractor.

C. Develop 30% drawings for ILS, yard piping, access road, and site improvements.

D. Develop list of construction specifications, bid and contract documents.

E. Hydraulic Impact Assessment

FNI will perform a hydraulic impact assessment to verify that the Package WWTP design does not result in any adverse impacts upstream or downstream of the project area. The hydraulic analysis will utilize the effective hydraulic model obtained from the City. It is assumed that any floodplain impacts will be mitigated by excavating onsite to provide compensatory storage and therefore a CLOMR or LOMR will not be required. The hydraulic impact assessment will include the following:

1) Develop the pre-project conditions hydraulic model by revising the effective FEMA hydraulic model to reflect the survey data obtained for the project. It is assumed that the effective model hydrology will not be updated with Atlas 14 flows and the effective flow will suffice for the purposes of this analysis since the site appears to be outside of the floodplain.

2) Develop a project conditions hydraulic model by revising the pre-project conditions hydraulic model to reflect the proposed Package WWTP improvements.

3) Compare the water surface elevations of the pre-project conditions model to those of the project conditions model for the 2-, 10-, 25-, and 100-year storm events to determine the extent of the floodplain impacts caused by the project and determine the amount of excavation required to mitigate any increases in water surface elevation.

4) Perform a floodway analysis to verify there are no changes to the regulatory floodway.

5) Summarize the results of the H&H analysis and no adverse impact verification in a technical memorandum and prepare the Floodplain Development Permit Application and Watershed Protection Plan Application.

F. Develop and coordinate City Site Preparation Permit.

G. Coordinate with successful offeror of Package WWTP process equipment to develop the site plan and equipment layout, define requirements for electrical service, foundations, piping interconnections, non-potable water, chemicals, residuals (screenings and waste sludge), access, and ancillaries such as stairs, heat tracing, etc.

H. Develop a performance specification for the temporary modular office/lab building, including finishes, furnishings, office and lab equipment requested by City.

I. Meetings/Site Visits

1) Project site visit for environmental permitting

2) Project site visit for survey coordination, maximum of 1

3) Storm Water/Drainage Review Site Visit

4) Attend 30% design review meeting with the City

J. Deliverables

1) Performance specification and bid documents for Package WWTP system for use by City's purchasing department in soliciting proposals.

2) 30% construction, bid and contract documents for the ILS, site work, foundations, electrical service, yard piping to the extent possible prior to selection of the Package WWTP supplier.

3) Draft Environmental Memorandum in PDF (Environmental Scope of Services described in Article II Special Services).

4) H&H Impact Study Technical Memorandum

5) Floodplain Development Permit Application

6) Watershed Protection Plan Application

7) Site Preparation Permit Application

8) Final Environmental Memorandum in PDF (Environmental Scope of Services described in Article II Special Services)

9) Performance specification for temporary modular lab/office building

10) Submittal will be in accordance with Attachment A – Engineering Scope of Services Checklist, Attachment B – Engineering/CIP Plan Review Checklist and Attachment C – GIS Submittal Checklist.

12. TPDES Permitting - Package WWTP: FNI shall provide professional services in this phase as follows:

A. Prepare meeting agendas and minutes and attend the following meetings:

1) Coordination meeting with Developer's permitting consultant (up to 2 meetings).

2) Follow-up with Developer's permitting consultant to answer questions related to the design/operation of the Package WWTP as related to the permit application.

B. Prepare information related to the design of the Package WWTP for inclusion in the TPDES Permit Amendment:

1) Prepare such documentation normally included in permit amendment applications such as process description, process flow diagram, material balance, general site plan, anticipated effluent discharge characteristics, etc.

2) Following submittal of the application, FNI will answer questions and respond to requests for additional information for up to 8 manhours. Effort in excess of 8 manhours of follow-up to address questions will be performed as Supplemental Services on a time and materials basis.

C. Deliverables

1) Meeting agendas and minutes

2) Engineering information for inclusion in the TPDES Permit Application

13. 90% DESIGN PHASE – Package WWTP (Bid Package 2): FNI shall provide professional services in this phase as follows:

A. Develop 90% construction plans and specifications, bid and contract documents for the ILS, site work, foundations, electrical service, electrical one-line diagrams, process and instrumentation diagrams, yard piping plans, standard and special details, and installation details for the Package WWTP and ancillaries. Division 0 and Division 1 Specifications to be provided by the City.

B. Prepare and submit letters, notifications, drawings, specifications, and final engineering report to TCEQ for regulatory approval.

C. Develop draft Start-up and Commissioning Plan

D. Meetings/Site Visits

1) Attend 90% design review meeting with the City

2) Attend Pre-application meeting with TCEQ Plan Review group

E. Deliverables

1) 90% construction plans, specifications, bid and contract documents.

2) Draft Start-up and Commissioning Plan

3) Submittals for TCEQ regulatory approval

4) Deliverables will be in accordance with Attachment A – Engineering Scope of Services Checklist. Project plans will be in accordance with Attachment B – Engineering/CIP Plan Review Checklist.

14. 100% DESIGN PHASE – Package WWTP (Bid Package 2): FNI shall provide professional services in this phase as follows:

A. After City review of 90% complete submittal, FNI will issue complete signed and sealed drawings, issued for bid and agency review. FNI will provide engineering reports, plans, and required documentation required for applicable agency review, including the TCEQ and other agencies.

B. Deliverables

Deliverables will be in accordance with Attachment A – Engineering Scope of Services Checklist. Project plans will be in accordance with Attachment B – Engineering/CIP Plan Review Checklist.

15. BID PHASE – Package WWTP (Bid Package 2): Upon completion of the design services and approval of 100% drawings and specifications by City, FNI shall provide professional services in this phase as follows:

A. Assist City by responding to questions and interpreting bid documents. Prepare and issue addenda to the bid documents to plan holders if necessary.

B. At City request, FNI will assist City in opening, tabulating, and analyzing the bids received. Review the qualification information provided by the apparent low bidder to determine if, based on the information available, they appear to be qualified to construct the project. Recommend award of contracts or other actions as appropriate to be taken by City. Pre-qualification of all prospective bidders and issuing a list of eligible bidders prior to the bid opening is an additional service.

C. Assist the City in conducting a pre-bid conference for the construction projects and coordinate responses with City. Response to the pre-bid conference will be in the form of addenda issued after the conference. Attend the tour of the project site after the pre-bid conference.

D. Assist City in the preparation of Construction Contract Documents for construction contracts. Provide one (1) set of Construction Contract Documents to the City which include information from the apparent low bidders bid documents, legal documents, and addenda bound in the documents for execution by the City and construction contractor.

E. No hard copies of the plans and specifications will be provided to the contractor.

F. Deliverables

1) Addendum(s), as required.

2) Contractor reference verification documentation

3) Recommendation of Award Letter

4) Documentation in accordance with Attachment C – GIS Submittal Checklist

5) Conformed Construction Plans in accordance with Attachment A – Engineering Scope of Services Checklist.

16. CONSTRUCTION PHASE GENERAL REPRESENTATION – Package WWTP (Bid Package 2): Upon completion of the bid or negotiation phase services, FNI will proceed with the performance of construction phase general representation services as described below.

In performing these services, it is understood that FNI does not guarantee the Contractor's performance, nor is FNI responsible for the supervision of the Contractor's operation and employees. FNI shall not be responsible for the means, methods, techniques, sequences or procedures of construction selected by the Contractor, or any safety precautions and programs relating in any way to the condition of the premises, the work of the Contractor or any Subcontractor. FNI shall not be responsible for the acts or omissions of any person (except its own employees or agents) at the Project site or otherwise performing any of the work of the Project.

The City agrees to include provisions in the General Conditions that require Contractor to include FNI: (1) as an additional insured and in any waiver of subrogation rights with respect to such liability insurance purchased and maintained by Contractor for the Project (except workers' compensation and professional liability policies); and (2) as an indemnified party in the Contractor's indemnification provisions where the City is named as an indemnified party.

A. Assist City in conducting preconstruction conference with the Contractor, review construction schedules prepared by the Contractor pursuant to the requirements of the construction contract.

B. Establish communication procedures with the City and Contractor. Submit monthly reports of construction progress. Reports will describe construction progress in general terms and summarize project costs, construction schedule and pending and approved contract modifications.

C. Establish and maintain a project documentation system consistent with the requirements of the construction contract documents. Monitor the processing of contractor's submittals and provide for filing and retrieval of project documentation. Produce monthly reports indicating the status of all submittals in the review process. Review contractor's submittals, including, requests for information, modification requests, shop drawings, schedules, and other submittals in accordance with the requirements of the construction contract documents for the projects. Monitor the progress of the contractor in sending and processing submittals to see that documentation is being processed in accordance with schedules.

D. Based on FNI's observations as an experienced and qualified design professional and review of the Payment Requests and supporting documentation submitted by Contractor, determine the amount that FNI recommends Contractor be paid on monthly and final estimates, pursuant to the General Conditions of the Construction Contract.

E. Construction Site Visits

1) Attend up to twenty-five (25) biweekly construction progress meetings via Microsoft Teams.

2) Attend up to ten (10) visits to the project site to coordinate with the Contractor and City as required to discuss challenges during construction.

3) Attend up to ten (10) miscellaneous project review and coordination meetings via Microsoft Teams.

4) Attend up to one (1) site visit to inspect project for substantial completion and prepare a list of deficiencies to be corrected by the contractor before accepting the project as substantially complete.

5) Attend up to one (1) start-up and commissioning planning meeting with contractor and Package WWTP supplier via Microsoft Teams.

6) Attend up to one (1) on-site testing and start-up meeting.

7) Conduct, in company with City's representative, a final review of the Project for conformance with the design concept of the Project and general compliance with the Construction Contract Documents. Prepare a list of deficiencies to be corrected by the contractor before recommendation of final payment. Assist the City in obtaining legal releases, permits, warranties, spare parts, and keys from the contractor. Review and comment on the certificate of completion and the recommendation for final payment to the Contractor(s). Visiting the site to review completed work in excess of one (1) trip is Supplemental Service.

F. Notify the City of non-conforming work observed on site visits. Review quality related documents provided by the contractor such as test reports, equipment installation reports or other documentation required by the Construction contract documents.

G. Work with Contractor to coordinate the work of testing laboratories and inspection bureaus required for the testing or inspection of materials, witnessed tests, factory testing, etc. for quality control of the Project. The cost of such quality control shall be paid by City and is not included in the services to be performed by FNI.

H. Interpret the drawings and specifications for City and Contractor(s). Investigations, analyses, and studies requested by the Contractor(s) and approved by City, for substitutions of equipment and/or materials or deviations from the drawings and specifications is an additional service.

I. Establish procedures for administering constructive changes to the construction contracts. Process contract modifications and negotiate with the contractor on behalf of the City to determine the cost and time impacts of these changes. Prepare change order documentation for approved changes for execution by the City. Documentation of field orders, where cost to City is not impacted, will also be prepared. Investigations, analyses, studies, or design for substitutions of equipment or materials, corrections of defective or deficient work of the contractor or other deviations from the construction contract documents requested by the contractor and approved by the City are an additional service. Substitutions of materials or equipment or design modifications requested by the City are an additional service.

J. Prepare documentation for contract modifications required to implement modifications in the design of the project. Receive and evaluate notices of contractor claims and make recommendations to the City on the merit and value of the claim on the basis of information

submitted by the contractor or available in project documentation. Endeavor to negotiate a settlement value with the Contractor on behalf of the City if appropriate. Providing these services to review or evaluate construction contractor(s) claim(s), supported by causes not within the control of FNI are an additional service.

17. GEOTECHNICAL ENGINEERING

FNI will prepare a scope of services and provide an exhibit indicating the proposed geotechnical bores required for the design of the project. The City will contract with a qualified geotechnical engineer to perform the bores, testing and recommendations for construction of the project. FNI will review the geotechnical engineer's work and identify if any additional documentation is required to complete the project.

18. SURVEY AND EASEMENT PREPARATION

The proposed survey scope of services will consist of topographical and boundary survey including the area around LS 24, the WWTP site, and the future gravity interceptor corridor. Survey limits assumed for this scope of services are shown in Attachment D. Survey for the future gravity interceptor between LS 51 and LS 24 is not included in this scope of services. This work will be performed by a subconsultant under the direction of FNI.

A. Provide topographical survey and survey of existing features and structures within the project limits.

B. Provide survey of geotechnical borings locations.

C. Research utilities and easements within the project boundaries. Obtain drawings of existing agency and municipal owned utilities and include locations of these utilities in the survey.

D. Coordinate utility marking with Dig Tess (level B), conduct survey and locate utilities within the project boundary. Obtain the services of a utility locator service (such as DIGTESS) and coordinate flagging of existing franchise utilities. Tie in the locations of the existing utilities on the survey.

E. Subsurface utility exploration (SUE) may be provided by the City as requested by the Engineer. Surveyor shall coordinate and survey uncovered utilities.

F. Provide control staking for the project. Construction staking shall be provided by the Contractor.

G. Parcels and Field Notes:

1) Perform deed, plat and courthouse record research and prepare metes and bounds descriptions, survey parcels and field notes for up to four (4) possible impacted parcels of land for permanent and temporary easement acquisition. The descriptions shall each contain drawing Attachment A and verbal description Attachment B, in accordance with State surveying standards.

2) Obtain copies of deeds and easement documents.

3) Survey existing property corners, fences and appurtenant property evidence along the alignment route.

4) Stake Final easement corridor from alignment data.

5) Show ownership and adjoiner ownership data for properties along the route.

6) Revise parcel descriptions and field notes per comments and final title report.

7) Stake all parcels.

19. TRANSIENT ANALYSIS

A transient model and analysis will be conducted for steady state conditions and for a pump failure at LS 24. The transient analysis will evaluate feasibility of the proposed pumping conditions at LS 24 into the existing force main infrastructure from LS 24 to the discharge point upstream of LS 51. A brief technical memorandum will be provided documenting the model. City to provide FNI with existing system information, including air release valve size and location and force main record drawings, pipe material, pressure rating, diameter, and length.

20. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

A Texas Pollutant Discharge Elimination System (TPDES) General Permit for Construction Activity (Permit No. TXR150000) is required for projects or activities that disturb equal to or greater than one acre. FNI shall prepare a SWPPP that describes BMPs that will be used to minimize the discharge of pollutants in stormwater from construction activity and non-stormwater discharges. The SWPPP will also identify any potential sources of pollution to surface waters in the state from stormwater discharges associated with construction activities and construction support activities. Where potential sources of these pollutants are present at a construction site, the SWPPP must also include a description of the management practices that will be used to prevent these pollutants from entering into surface water in the state or WOTUS. Preparation of a SWPPP is not anticipated for LS 24 Upgrades (Bid Package 1).

21. ENVIRONMENTAL REVIEW AND DOCUMENTATION

FNI will perform Environmental review for the proposed work at the existing LS 24 site, the WWTP site, and the future interceptor corridor from LS 24 to the WWTP. FNI will include environmental review for the Permanent WWTP with limits indicated on Attachment D. The Environmental Review will be documented in a Technical Memorandum and a coordination letter to Texas Historical Commission (THC). To prepare those documents, FNI proposes to perform the following tasks where applicable:

A. Desktop File Review and Survey – As a first step, FNI will assemble and review data such as past and present aerial imagery, USGS topographic maps, National Wetlands Inventory (NWI) maps, the USGS National Hydrography Dataset (NHD), preliminary engineering reports, life history literature, county list of federally listed species, and soils data within the area of the proposed project. Databases on prior cultural resource surveys and existing historical resources found in the project area would also be reviewed.

B. Field Survey – Following the desktop file review and survey, FNI will perform a field survey of the proposed project area to document existing environmental conditions and assess potential project impacts. This effort would include a Waters of the US (WOTUS) delineation performed according to US Army Corps of Engineers (USACE) guidance and policies. A habitat assessment would also be performed to document any potential habitats for federally listed species that may occur in the county.

C. Cultural Resource Desktop Review and Texas Historical Commission (THC) Coordination – To address compliance with Section 106 of the National Historic Preservation Act and Antiquities Code of Texas, a desktop file review and submission of a coordination letter to THC would be submitted to determine if no survey is necessary or if further investigation would be required.

D. Preparation of Environmental Review Technical Memorandum – FNI will prepare a technical memorandum that provides the methods and results of the Environmental Review. Figures, representative photographs, and Wetland Determination Data Forms (if applicable) would be included in the Technical Memorandum.

ARTICLE II

SUPPLEMENTAL SERVICES: Additional Services to be performed by FNI, if authorized by the City through written authorization, which are not included in the above-described BASIC SERVICES, are described as follows:

Supplemental Technical Services – During the course of work, a need for additional engineering services may be identified. A budget amount has been established for unidentified services but the scope of services for these services will be determined as needs arise. The need for these services shall be determined by the City and FNI. Use of this budget shall be at the sole discretion of the City, who shall identify the need for additional services and negotiate a mutually agreeable budget with FNI at that time. Supplemental Services may include, but are not limited to, the following:

A. Temporary WWTP Site Platting – FNI will contract with a subconsultant to provide platting services through the authorized platting jurisdictions. FNI will coordinate with the City, subconsultant, and other parties required to plat the site according to City standards and requirements.

ARTICLE III

ADDITIONAL SERVICES: Any services performed by FNI that are not included in the Basic Services or Authorized specifically by City under Supplemental Services described above are Additional Services. Additional Services to be performed by FNI, if authorized by City, are described as follows:

1. Geotechnical Engineering and Subsurface Utility Engineering (SUE).
2. Evaluation and design odor control systems, operating costs, etc.
3. Design changes for the Package WWTP after Preliminary Engineering Phase as a result of coordination with PDB team for the permanent WWTP project.
4. An analysis for a portable generator or analysis of different options to provide back-up power for the site (diesel vs. natural gas, or permanent vs portable generator).
5. Radio path study or analysis of different communication options (ex: radio vs fiber optic cable).
6. SCADA and control system programming.
7. Electrical Testing including factory and site acceptance testing.
8. Cathodic protection system design.
9. Design of Radio Repeater Station.
10. Furnish inspections and Commissions Reports required by IECC.
11. Sound study for generator placement.
12. Procurement by other means such as Competitive Sealed Proposal or CMAR.
13. Preparation of construction traffic control plan(s).
14. Furnishing full time on-site construction Resident Representation services.

15. Submitting and coordinating project through City's development review process.
16. Furnishing Special Inspections required under chapter 17 of the International Building Code. These Special Inspections are often continuous, requiring an inspector dedicated to inspection of the individual work item, and they are in additional to General Representation and Resident Representation services noted elsewhere in the contract.
17. Investigations involving consideration of operation, maintenance and overhead expenses, and the preparation of rate schedules, earnings and expense statements, feasibility studies, appraisals, evaluations, assessment schedules, and material audits or inventories required for certification of force account construction performed by the City.
18. Providing shop, mill, field or laboratory inspection of materials and equipment.
19. Preparing Operation and Maintenance Manuals or conducting operator training.
20. Preparing data and reports for assistance to the City in preparation for hearings before regulatory agencies, courts, arbitration panels or any mediator, giving testimony, personally or by deposition, and preparations therefore before any regulatory agency, court, arbitration panel or mediator.
21. Assisting City in official claims or disputes with Contractor(s).
22. Performing investigations, studies and analyses of substitutions of equipment and/or materials or deviations from the plans and specifications.
23. Assisting City in the defense or prosecution of litigation in connection with or in addition to those services contemplated by this proposal. Such services, if any, shall be furnished by FNI on a fee basis negotiated by the respective parties outside of and in addition to this proposal.
24. Construction Staking.
25. Environmental and Archeological
    A. Preparation of a Pre-Construction Notification or Individual Section 404 permit application for submittal to the USACE;
    B. Preparation of a Jurisdictional Determination (JD) Evaluation Report;
    C. Presence/absence surveys or a Biological Assessment (BA) for federally listed threatened/endangered species;
    D. Applications for State or Federal permits or easements;
    E. Phase I or II Environmental Site Assessment;
    F. Cultural Resource field surveys or monitoring, as requested by Texas Historical Commission;
    G. Texas Parks and Wildlife Department (TPWD) Aquatic Resource Recovery Plan;
    H. Identification of tree species and/or preparation of a tree mitigation plan required due to tree ordinance compliance;
    I. SWPPP monitoring and inspections;
    J. Other environmental services not specifically defined in this scope of services.

City of San Marcos

Engineering Scope of Services Checklist

Project: # LS 24 Upgrades, Main LS for 2nd WWTP and FM

Subcontractors to the Engineer:
1) Baseline

Scope	Add'l Services	NIC	I. General
			A. Federal Funding? If yes, add additional task to meet federal funding requirements.
		x	1) Task I:
		x	2) Task II:
		x	3) Task III:
			B. Data Collection/Review
x			1) Review Reports/Studies/Drawings
x			2) Site Visit(s)
x			3) Staff Meeting(s)
			C. Survey - **See General Requirements in the GIS Checklist for Survey Requirements**
x			1) Acquire Temporary Right of Entry – How Many? (up to 4) Typically handled in-house
x			2) Establish Project Control ~ set 3 monuments minimum (typically every project)
x			3) ROW Survey ~ How detailed the ROW research needs to be? {Specify One}
		x	a) Route Survey per TSPS Manual of Practice Requirements for Category 2 – Route Survey ~ typically used for most project
x			b) Boundary Survey ~ typically for full depth reconstruction with drainage. Signed and sealed boundary survey shall be submitted per TSPS Manual of Practice Requirements for Category 1A – Land Title Survey Boundary survey will be provided in areas where easements are required.
x			4) Existing Conditions Survey~ Survey all utilities & surface features within the project limits. Elevations for all inverts and top of lids. Existing lift station wet well and manhole survey included.
x			5) Topographic Survey {Specify One}
		x	a) Use COSM Lidar + Limited Topo Survey
x			b) Full topographic survey with enough detail to prepare 1' contours
x			6) Tree Survey - Specify which level of details is needed. Project limits exhibit agreed on in advance. {Specify One}
x			a) All trees 9" and above should be surveyed and tagged ~ Typical Option
		x	b) All trees & shrubs should be tagged within project limits ~ Rarely used
		x	c) Condition Assessment by Consultants/City Arborist after trees are tagged and surveyed by surveyor. Occurs after 6.a. and tree mitigation table and after 60% submittal. May be added by CIS if needed.
			D. Field Investigations
	x		1) Subsurface Utility Locate – **How Many? (TBD)** SUE will be provided through City IDIQ contract and recommended by Engineer and approved by City.
	x		2) Geotechnical **How Many? (TBD)** Engineer will provide scope for geotechnical work, and City will procure services of geotechnical engineer through IDIQ contract.
		x	3) Geological Assessment - Typically Recharge Zone Only
			E. Determine Easement/Land Acquisition Requirements
x			1) Prepare Aerial Exhibits showing Temporary Workspace Limits as well as proposed easement/ROW takings. – 3 easements aerial exhibits have been included in the scope.
x			2) Field Notes – 3 easements have been included in the scope.
		x	3) Appraisal ~ Typically completed with on-calls
		x	4) Title Work ~ Typically completed with on-calls
		x	5) Negotiations of Easements ~ Typically completed in-house

Scope	Add'l Services	NIC	II. Preliminary Phase (PER)
			A. Meetings
x			1) Project Meetings ~ Enter Weekly, Monthly, or Specify: Assume 4
		x	2) Public Meeting(s)
		x	3) Prepare Exhibits For Public Meetings
		x	4) Utility Coordination Meeting(s) ~ Enter Weekly, Monthly, or Specify:_____
			B. Pipelines – Wastewater (gravity main)
x			1) Determine Alignment(s) - How Many? (2)
		x	2) Preliminary Hydraulics/Modeling ~ Typically not required; refer to Master Plans
		x	3) **Other**
			C. Pipelines – Wastewater (force main)
x			1) Determine Alignment(s) – How Many? (2)
x			2) Preliminary Hydraulics/Modeling ~ Typically not required; refer to Master Plans
		x	3) **Other(_____)**
			D. Pipelines – Water
		x	1) Determine Alignment(s)
		x	2) Preliminary Hydraulics/Modeling ~ Typically not required; refer to Master Plans
		x	3) **Other(_____)**
			E. Plants/Facilities
x			1) Develop Design Parameters - LS No. 24 Upgrades and Package WWTP
		x	2) **Other**
			F. Streets
		x	1) Traffic Counts
		x	2) Cross-Section Alternatives
		x	3) Complete Street Assessment

		x	4) Traffic Signals
		x	5) Sidewalks
		x	6) **Other(_____)**
			G. San Marcos Electric (SMEU)
		x	1) Underground Conduit
		x	2) Photometric for Street Lighting (check with SMEU, they have in-house as well)
		x	3) If effected by project, coordination required
			H. Drainage
		x	1) Watershed Analysis
		x	2) Determine Alignments
		x	3) Preliminary Hydraulics/Modeling
		x	4) LID/Water Quality
		x	5) **Other(_____)**
			I. Project Sustainability
		x	1) Alternative Methods For Construction- Alternatives City should consider to improve the project, include associated tradeoffs
		x	2) Alternative Green Solutions
		x	3) Review Engineering Sustainability Checklist
			J. Texas Historic Commission
x			1) Letter Only to THC - typically projects that occurs within limits of an existing road
x			2) Archeological - Desktop Review and short report to THC (Typically undisturbed areas)
		x	3) Archeological - Full Review with Shovel Test and detailed report to THC
			K. Determine Project Permitting/Design Requirements
		x	Review Project to determine if any additional permits are needed (Typical Permits listed below)
			1) TxDOT ROW 2) County ROW 3) Floodplain Zone 4) TCEQ a. Edwards Contributing b. Recharge Zone c. WPAP d. SCS 5) TPWD - Parks 6) UPRR - Railroad 7) FAA Jurisdiction 8) Army Corps 9) US Fish and Wildlife 10) **Other(_____)**
			L. Utility Coordination
		x	1) Review Project to determine which utilities are within the project limits
x			2) Identify Utility Conflicts - Prepare an overall exhibit and utility conflict matrix
		x	3) Coordinate with Utility Companies to resolve conflicts ~ Typically handled by City Staff
			811 Pedernales Electric Bluebonnet Electric Century Link CenterPoint Gas Enterprise Gas American Tower LCRA Maxwell Time Warner Zayo AT&T Grande Texas State University Crystal Clear GBRA
			M. Cost Estimate
x			1) Develop Construction Cost Estimates
			N. Deliverables
x			1) Monthly Status Report (PDF)
x			2) Preliminary Engineering Report Draft (1 PDF) Technical Memorandum Only
x			3) Preliminary Engineering Report Final (1 PDF, 1 DWG) Technical Memorandum Only
		x	4) GIS Submittal Checklist & Additional Required Submittals.
x			5) Plan Sheets - Specify Size
x			a) Roll Plot - size & scale as determined by Consultant
		x	b) 11" x 17" after PER is approved of final scope
			6) Notes:_____
Scope	**Add'l Services**	**NIC**	III. Design Phase (30/60/90/100%) ~ See Engineering/CIP Plan Review Checklist For Additional Details
			A. Meetings

x			1) Project Meetings
x			**Enter Weekly, Monthly, or Specify:_____**
		x	2) Public Meeting(s)
		x	3) Prepare Exhibits For Public Meetings
x			4) Utility Coordination Meeting(s)
			B. Design Sheet Categories
x			1) Cover Page
x			2) Index
x			3) General Notes
x			4) Quantity Table – By Sheet (Required by 90% submittal)
x			5) Project Layout & Survey
x			6) Typical Sections
x			7) Tree Mitigation - Table Of All Trees & Plan of Replacement Trees. If number of trees are small, show on Erosion Control Sheets
x			8) Erosion Control - {Specify}
x			a. SWPPP - TXDOT Template (Required on all projects)
x			b. EPIC - TXDOT Template (Required on all projects)
x			c. Permanent & Temporary - combined as one plan set
		x	d. Permanent & Temporary - prepared as 2 separate plan sets
x			9) Sequence of Construction/Phase (can be combined with Traffic Control Narrative if needed)
		x	10) Traffic Control Plan {Specify One}
		x	a. Minimum Requirements - simple write up and standard details
		x	b. Detailed Phasing - Typical Section & Plan Sheet for every phase
		x	11) Removal
		x	12) Roadway - Plan & Profile
		x	13) Grading Plan For Intersections - show limits of accessible path
		x	14) Driveways {Specify One}
		x	a. Plan & Profile for Each Driveway
		x	b. Driveway Table
x			15) Drainage - **For Package WWTP Site Only**
x			a. Hydrologic Calculations
x			b. Drainage Area Map
x			c. Detention Basin, if Required
		x	d. Plan and Profile
		x	e. Laterals Profiles
		x	f. Water Quality
		x	16) Structural
		x	17) Retaining Walls {Specify One}
		x	a. Plan only - Typically 24" and smaller
		x	b. Plan & Profile - Typically 24" and larger
		x	18) Water Line {Specify One}
		x	a. Plan only - Typically 8" Utility Project Only
		x	b. Plan & Profile - Required for 12" and Larger. May want it for Full Depth Reconstruction or Drainage Projects
x			19) Wastewater Plan & Profile
x			20) Force Main Plan & Profile
		x	21) Reclaimed Water {Specify One}
		x	a. Plan only - Typically 8" Utility Project Only
		x	b. Plan & Profile - Required for 12" and Larger. May want it for Full Depth Reconstruction or Drainage Projects
x			22) Lift Station
x			a. Site Plan
x			b. Mechanical Plan
x			c. Structural Plan
x			e. Electrical Plan
x			f. Control Panel Schematic Diagram
x			g. RTU Schematic Diagram
x			23) Electrical – Underground {Specify One}
x			a. Plan only
		x	b. Plan & Profile
x			24) Electrical – Lighting
		x	25) Traffic Signals
		x	a. Existing Layout
		x	b. Temporary Signal Design
		x	c. Proposed Signal Design
		x	d. Phasing & Timing Plan
		x	e. Signal Wiring
		x	f. Elevations
		x	g. Quantities & Notes
		x	26) Signing & Pavement Markings
		x	27) Utility Layout – (Color Coded)
		x	28) Landscaping
		x	29) Irrigation
		x	30) Cross-Sections (Every 50')
			C. Permits
		x	1) TDLR Review
x			2) COSM Floodplain Permit
		x	3) TXDOT Permit ~ Typically submitted by COSM Staff
		x	4) Hays / Guadalupe County Permit

x			5) Others: TCEQ
		x	6) Others:
			D. Utility Coordination
		x	1) Update Utility Conflicts - Prepare an overall exhibit and utility conflict matrix
		x	2) Coordinate with Utility Companies to resolve conflicts ~ Typically handled by City Staff
			E. Deliverables – (Must follow COSM CADD standards)
x			1) Monthly Status Report
x			2) 30% Submittal (1 PDF, DWG) (1"=40'H & 1"=10'V) a. Plan Set i. Plan Sheets (see items under III. b. Design Phase) i. Submittals **may be delayed as indicated** on the Engineering/CIP Plan Review Checklist b. Opinion of Probable Construction Cost c. Construction Schedule - Duration by Tasks e. GIS Submittal Checklist f. Engineering/CIP Plan Review Checklist
x			3) 60% Submittal (1 PDF) (1"=40'H & 1"=10'V) - Bid Package 2 Only a. Plan Set i. Plan Sheets (see items under III. b. Design Phase) ii. Submittals **may be delayed as indicated** on the Engineering/CIP Plan Review Checklist iii. Profile of all utilities specified except Water & Force Main iv. List of Standard Details – COSM and COA v. List of Standard Specifications – COSM Div 1 and CO vi. Project Specific/Special Details b. Opinion of Probable Construction Cost c. Construction Schedule - Duration by Tasks e. Response Comments to 30% Design f. Engineering/CIP Plan Review Checklist
x			4) 90% Submittal (1 PDF) a. Plan Set i. Plan Sheets (Include items from 60% submittal) ii. Quantities – Broken down by page iii. Profile of All Utilities Specified Above iv. Project Specific/Special Details b. Opinion of Probable Construction Cost c. Construction Schedule d. Specifications - Submitted as a single PDF i. Index of Specs ii. Modifications to Austin Specs iii. COSM Adopted Specs - Project Specific iv. Special Provisions v. Special Specifications e. Bid Form (Excel File) f. Response Comments to 60% Design h. Engineering/CIP Plan Review Checklist
x			5) 100% Submittal (1 PDF, 1 DWG) a. Sealed Plan Set (include all items from 30% 60%, & 90% submittal) b. Opinion of Probable Construction Cost c. Construction Schedule d. Specifications - Submitted as a single PDF i. Index of Specs ii. Modifications to Austin Specs iii. COSM Adopted Specs - Project Specific iv. Special Provisions v. Special Specifications e. Bid Form (Excel File) f. Response Comments to 90% Design g. Engineering/CIP Plan Review Checklist h. GIS Submittal Checklist i. Construction Checklist
Scope	**Add'l Services**	**NIC**	IV. Bid Phase
			A. Meetings
x			1) Attend Pre Bid Meeting ~ Agenda prepared by COSM Staff
x			2) Answer Questions
x			3) Issues Addenda to Purchasing
			B. Bid Review
x			1) Bid Tabulation of Submitted Bids
x			2) Reference check for bid qualification & Recommendation of Award
		x	a. Check for Debarment and perform a background check (only required for Federal Funded Jobs)
x			b. Verify References of top 3 bidders
			C. Deliverables
x			1) Letter of recommendation (add statement that debarment has been checked)
x			2) After Bid Opening - Conformed Plans (1 PDF, 1 DWG, 2-22"x34" Sets, 4-11"x17" Sets)
Scope	**Add'l Services**	**NIC**	V. Construction Phase
			A. Assist with Construction Tasks

x			1) Project Meetings (Bi-weekly)
x			2) Attend Pre-Construction Meeting ~ Agenda prepared by COSM Staff
x			3) Submittal Review
x			4) Respond to Requests for Information/Modifications
x			5) Construction Observation (Bid Package 1): Up to 4 Site Visits
x			6) Construction Inspection (Bid Package 1): Assume 2 Inspections
			(Bid Package 1): FNI has 2 misc. project review and coordination meetings
			(Bid Package 1): FNI included one site visit to identify any warranty items and prepare a list of deficiencies.
x			7) Construction Observation (Bid Package 2): Up to 10 Site Visits
x			8) Construction Inspection (Bid Package 2): Assume 10 Inspections
			(Bid Package 2): FNI has 10 misc. project review and coordination meetings.
			(Bid Package 2): FNI included two site visits to identify any warranty items and prepare a list of deficiencies.
		x	9)
			Notes:_____
x			10) Pay Estimate Review
x			11) Review Change Orders
		x	12) TDLR Inspection & Approval
x			13) Project Startup - Typically Lift Station Projects Only
			Notes: FNI has included two substantial completion visits per Bid Package**.**
x			14) Attend Final Walk Through FNI has one final inspection site visit per Bid Package.
			B. Survey
	x		1) Reset Monuments ~ Typically not required unless the design duration is long
		x	2) Construction Layout For SMEU - Typically only enough detail for SMEU to move overhead in advance of CIP project. {Specify One}
		x	a) Stake proposed poles and proposed features within 5' of poles
		x	b) Stake proposed & existing ROW within project limits
			C. Deliverables
x			1) Site Visit Reports
x			2) Submittal Response & Log
x			3) RFI Response & Log
Scope	**Add'l Services**	**NIC**	VI. Record Drawing Phase
			A. Survey ~ See GIS Submittal Checklist For Items To Be Surveyed
x			1) Record Drawing Survey - After construction is completed, survey installed appurtenances and invert elevations
			B. Plan Revisions
x			1) Update alignment on plans to reflects GPS data.
x			2) Update text on Profiles Inverts to reflect Record Drawing Survey.
			C. Deliverables
x			1) Draft Drawings (1-22"x34" Set, 1-11"x17" Set)
x			2) Final Drawings Per GIS Checklist
x			3) GIS Submittal Checklist & Additional Required Submittals
			FEES, PAYMENTS, AND INVOICING
			Fill out Exhibit 3 or Provide Own Template (If using own template, copy text on bottom of spreadsheet)
			Hourly rates must be included as an attachment with statement about rates applying through contract duration
			PROJECT SCHEDULE
			Include Each Phase as Scoped with Associated Schedule. Attach PDF of Microsoft Project Schedule and submit the electronic version.
			Note that the time between Design and Construction is set by the City.
			LS 24 Upgrades
			60 Days to completed Draft TM submittal
			30 Days to completed Final TM submittal
			New LS and Force Main
			90 Days to completed Draft TM submittal
			30 Days to completed Final TM submittal
			36" Gravity Interceptor
			60 Days to completed Draft TM submittal
			30 Days to completed Final TM submittal
			Bid Package 1:
			N/A Days to completed 20% submittal
			75 Days to completed 30% submittal
			N/A Days to completed 60% submittal
			75 Days to completed 90% submittal
			10 Days to completed 100% submittal
			240 Days anticipated for construction
			Bid Package 2:
			N/A Days to completed 20% submittal
			90 Days to completed 30% submittal
			75 Days to completed 60% submittal
			60 Days to completed 90% submittal
			10 Days to completed 100% submittal
			420 Days anticipated for construction

Engineering/CIP Plan Review Checklist

PROJECT NAME : _____

DATE REVIEWED : 30% - 60%- 90%- 99%- 100%-

INSTRUCTIONS : **X** = TASK COMPLETE **?** = NEED MORE DETAILS **N/A** = NOT APPLICABLE **F** = TO BE COMPLETED WITH FUTURE PHASE

30%	60%	90%	99%	100%	***DESCRIPTIONS***	***Comments***
30%	60%	90%	99%	100%	***INTERNAL COORDINATION - TO BE COMPLETED BY CITY PM***	
					Check City's 5-Yr Transit Plan for bus stops and include improvements, if within project limits	
					Check with IT for fiber conduit needs	
					Check the 5 Year Sidewalk Plan for conflict	
					Check Wastewater Master Plan for conflict	
					Check Transportation Master Plan for conflict	
					Check Water Master Plan for conflict	
					Check Drainage Master Plan for conflict	
					Check 5 Year Mill & Overlay Plan for conflict	
					Check CIP Plan for conflict	
					Check Electric Master Plan for conflicts	
					Check with SMEU for conflicts on maintenance projects	
30%	60%	90%	99%	100%	***EXTERNAL COORDINATION - TO BE COMPLETED BY DESIGN ENGINEER***	
					Map Request Submitted to Charter	
					Map Request Submitted to Bluebonnet	
					Map Request Submitted to Grande	
					Map Request Submitted to CenturyLink	
					Map Request Submitted to American Tower	
					Map Request Submitted to Texas State	
					Map Request Submitted to ATT	
					Map Request Submitted to PEC	
					Map Request Submitted to Crystal Clear	
					Map Request Submitted to CenterPoint Energy	
					Map Request Submitted to other utilities in the project limits	
30%	60%	90%	99%	100%	***GIS QUALITY CONTROL CHECK***	
					Submit Plans to COSM GIS Technician to perform QA/QC - ***See GIS Submittal Checklist***	
30%	60%	90%	99%	100%	***COSM DESIGN MANUAL - MUST BE USED WHILE PREPARING DESIGNS***	
					Water Distrubition System Design Criteria Manual - 1/13/2020	
					Wastewater Collection System Design Criteria Technical Manual - Most Current Version	
					Lift Station - Preferred Products Manual	
					Stormwater Technical Manual - 6/1/2020	
					Transportation Design Criteria Manual - 12/18/2018	
30%	60%	90%	99%	100%	***GENERAL - CONSTRUCTION PLANS***	
					Sheet shall be designed on 11"x 17"	
					Scale shall be 1"=40' (Horizontal) and 1"=10' (Vertical) on 11"x17"	
					North Arrow	
					Scale (graphic scale with descriptive text of scale)	
					Street names, if any part of a street is shown	
					Property Address, Owner Name & R-value shown for all parcels	
					Legend shown and includes all symbols	
					Design follows COSM design criteria	
					Engineer's opinion of probable construction cost	
					Proposed easements shown (temporary and permanent)	
					100-Year Floodplain Boundary	
					For aerial installations the plans clearly show and differentiate between existing poles and new poles	
					Location of the highway crossing clearly shown (if applicable)	
					Label all Abandoned Water, Wastewater, and Stormwater Utilities (Show Limits)	
					Match Marks - All Match Marks need to be match Roadway Match Mark location. On Utility Plans, show both Roadway Match Mark and Utility Match Mark	
					Right of Way Line	
					Limits of Construction	
					Construction specifications signed and sealed by a PE licensed in Texas	
					Construction plans signed and sealed by a PE licensed in Texas	
					Existing utilities shown:	
					Water	
					Wastewater	
					Stormwater	
					Gas	
					Electric (overhead and buried)	
					Communications (overhead and buried)	
					Location and information of all SUE work (Show marker on plans)	
					Easements - Show and label all existing, proposed, and temporary easements shown and labeled:	
					Minimum easement width is 20'. Needs to be wider for deeper mains.	
					Verify if you need any Temporary Workspace License Agreement (TWLA)	
					All construction within LOC or in the ROW or within an easement - verify easements with Acquisition Specialist	
					TCEQ (If in recharge zone)	
					Edwards Aquifer Recharge, Transition, and/or Contributing Zone Boundaries (if applicable)	
					Edwards Aquifer Recharge features (if applicable)	
					Sensitive feature Protection Zone Boundaries (if applicable)	
					Water Quality and Buffer Zones per Ch.5 (will be Ch. 6 of Codes SMTX) {if applicable}	
					TCEQ Construction Notes (if applicable)	
					WPAP Permit	
					SCS Permit	
30%	60%	90%	99%	100%	***COVER PAGE***	

30%	60%	90%	99%	100%	DESCRIPTIONS	Comments
					City of San Marcos Logo	
					Project Name, limits, length and description	
					Location map with the limits of the project clearly defined with major street or highway names/designations	
					Signature blocks for all relevant personnel	
					Names/Logos of each design firm responsible for plans	
					Design Engineers Seal	
					TDLR number (if required)	
					Index of all sheets ***(or separate index sheet)***	
30%	60%	90%	99%	100%	***GENERAL NOTES***	
					CIP general Construction Notes. Most current from webpage.	
					Provide a sequence of Construction List (if there is no separate Phase Plan)	
30%	60%	90%	99%	100%	***QUANTITY TABLE***	
					Overall quantity sheet with breakdown by sheet (or bid quantities shown on each sheet)	
					Spec reference shown?	
30%	60%	90%	99%	100%	***PROJECT LAYOUT & SURVEY***	
					Survey control points shown in plan view?	
					COSM monuments shown?	
					Geotechnical Bores shown, if any where obtained?	
					Table of Northing, Easting and Elevation listed for each control point	
30%	60%	90%	99%	100%	***TYPICAL SECTION***	
					Dimensions shown from face of curb to face of curb to match transportation design manual	
					Existing and Proposed ROW/Easements shown?	
					Paving thickness $\geq$ geotechnical recommendation.	
					Paving base shown extending 3' from back of curb to match detail?	
					Paving thickness at lip of gutter should match curb thickness. 6" typical.	
30%	60%	90%	99%	100%	***TREE MITIGATION (IF REQUIRED OR SHOW ON E&S PLANS)***	
					Existing Tree List. Indicate if saved or removed list. Show size and species.	
					Tree Table shall list: Tag Number, Species, Diameter, Removal/Protection/ within limits of contruction.	
					Tree Mitigation List (trees proposed in landscape plans or E&S plans)	
30%	60%	90%	99%	100%	***EROSION & SEDIMENTATION CONTROLS***	
					Show tree protection/removal with details	
					Tree Removal List. Show size and species. ***(if no tree mitigation section)***	
					Temporary fencing necessary to turn cattle if applicable called out along entire LOC	
					Temporary Sedimentation Ponds (per TCEQ permit) for disturbed drainage areas greater than 5 acres. See permit for exceptions.	
					Show existing and proposed storm structures	
					Existing contours and proposed flow arrows (1' Typical, 2' max)	
					TPDES Stormwater Pollution Prevention & EPIC Sheet - Use TXDOT template	
					Seeding with soil retention blankets or sod. Match existing where required (verify seeding with any easement agreement).	
					Sod is preferred for repairs in front of existing residential neighborhoods	
					Irrigation requirements specified for establishing grass	
30%	60%	90%	99%	100%	***CONSTRUCTION PHASING (TRAFFIC CONTROL NARRATIVE)***	
					Simple Plan - no section needed; shown with General Notes	
					Detailed Phasing needed - must coordinate with TCP	
30%	60%	90%	99%	100%	***TRAFFIC CONTROL PLAN - DETAILED VERSION***	
					Show typical section for each phase	
					Verify 10.5' minimum (11' preferred) width for all lanes	
					4' Pedestrian route accounted for?	
					If low profile concrete barriers (LPC) are used, need to include 1' contingency from LPC to edge of travel lane	
					Did you drive all detours to confirm they are acceptable? No one ways or road too narrow?	
					Overall key map required for each phase?	
					Detailed layout required for each phase?	
					Include COA or TxDOT details; as referred to in the TCP.	
30%	60%	90%	99%	100%	***REMOVAL***	
					Removal plan required?	
30%	60%	90%	99%	100%	***ROADWAY***	
					Call out non-standard curb limits on plans (Catch is standard)	
					If Mill and Overlay, must construct ADA compliant ramps	
					Location and Identification number clearly identified for all TxDOT highways	
					Horizontal layout points, bearings and distances, curve data	
					Roadway base shall be 3' behind back of curb. Verify quantities are correct.	
					Sidewalk and/or hike and bike trail locations and dimensions for proposed and existing curb, etc.	
					Verify intersections sight distance (horizontal and vertical) are compliant. Reference section 1.4 of TDM.	
					Bus stop shelters, if any, designed per Table 7-3 of TDM	
					Street design is compliant with Tables 1-1 to 1-5 of the TDM	
					Cross-slope shown as minimum of 1.5% or maximum of 3%. (2% Preferred)	
					Minimum curb return radius per Table 1-12 of TDM	
					PROFILE:	
					Existing & proposed centerline elevations	
					Existing right-of-way elevations and 10' - 30' past right-of-way, as required	
					All crosswalks cross slopes should be designed at 1.5%	
					Check placement of crown in road also catch or spill curbs and drainage area	
					Vertical curve data with appropriate K value per speed limit. Reference section 1.5.3 of TDM	
30%	60%	90%	99%	100%	***GRADING PLANS FOR INTERSECTIONS***	
					Intermediate top of curb elevations along street	
					Directional flow arrows - interior of lots	
					For valley gutters, identify the ADA path on the typical section if if the path crosses the valley gutters	
					Show 1.5% ADA path along the cross-walk	
					Corner of lot elevations	
30%	60%	90%	99%	100%	***DRIVEWAYS***	
					Driveway table or P&P for all driveways on reconstruction projects. (P&P prefered for full depth reconstruction)	
					Minimum curb return radius per Table 5-1 & 5-2 of TDM	
					Spacing per Table 5-1 & 5-2 of TDM	

30%	60%	90%	99%	100%	***DESCRIPTIONS***	***Comments***
					Show retaining walls that intersect driveways. Does retaining wall need to extend up driveway?	
					Verify slope in profile meets requirements shown in standard details (433S-A-SM)	
					A copy of a TxDOT permit is provided for each proposed driveway on TxDOT roadway(s)	
30%	60%	90%	99%	100%	***DRAINAGE***	
					Hydrologic Calculations	
					Detailed calculations such as routing program computations should be documented in a drainage report ~ Show both 25 & 100-year storm events using Atlas 14 rainfall data Per Storm Water Technical Manual (STM) 3.2.1.6.3 ~Both "on-site" and "overall"/"downstream" calculations provided	
					Rational Method calcs shown on plan sheets ~Drainage Area, Runoff Coefficients, Impervious Cover, Time of Concentration, Rainfall Intensity, and Peak Runoff (flow) for each subbasin	
					SCS Method supporting calcs shown on plan sheets ~Drainage area, Weighted Curve Number computation, Impervious Cover, Time of Concentration, Flow Path, and Peak Runoff (flow) for each subbasin	
					Drainage Area Map	
					"Existing" Overall Drainage Area Map with existing drainage areas and topography shown with minimum 1' contours	
					"Proposed" Overall Drainage Area Map with proposed drainage areas and topography shown with minimum 1' contours	
					On-site Proposed Drainage Area Map for smaller drainage areas captured such as sub-areas to each inlet	
					Flow direction arrows, Time of Concentration lines and type segments, & flowplaths shown	
					Indicate points of analysis on Drainage Plans where flow leaves the site that include flow comparison tables, existing versus proposed	
					Show FEMA Floodway and Floodplain Boundaries (ref. FIRM panel No. and date and pending CLOMR or LOMR case numbers)	
					Show Water Quality and Buffer Zones per CoSM Land Development Code (LDC) Section 6.2.2	
					Show Ordinary High Water Mark in Waters of the US	
					Detention Basin, if required	
					Detention Basin Outlet Structure showing stage outflow elevations for 2, 10, 25, and 100-year storm events. Required internal rock baffle per section STM 3.3.5.6.	
					Detention Basin Inlet Structure (headwall/energy dissipaters)	
					Stage-storage-discharge relationships for detention facilities shown on table	
					Design Sheets	
					All structures and pipes labeled	
					For open channels ~ Show cross-section and label 100-year HGL & Freeboard	
					Curb/Grate Inlet sizing calculations per STM 3.3.3	
					Max. 500' between Junction boxes per STM 3.3.4.3	
					Area inlet preferred - do not use grate; need to specify raised 4-sided inlet. PS approval required for using grate inlet	
					Plan sheets showing proposed topography with 1' contour intervals tying to existing	
					Profile shown for all Storm Pipe:	
					Show Pipe size, Length and Slope	
					Show Material and specify including Class III or Class IV RCP	
					Manhole stations & top of rim elevation called out	
					Invert elevation called out; include direction and in/out at each callout.	
					Top of existing and proposed ground shown	
					Elevations shown on all grade breaks	
					Show 25 and 100-year HGL, flows, and velocities on storm sewer profile and tail water if applicable.	
					Open Channel ~ Show 100 year flows, velocity & hydraulic grade line	
					Are you trapping water on private property? Refer to cross-sections. Need open back inlets?	
					Headwall and energy dissipaters showing outflow velocity	
30%	60%	90%	99%	100%	***STRUCTURAL***	
					Structural plan required?	
30%	60%	90%	99%	100%	***RETAINING WALLS***	
					Retaining walls with top of wall and bottom of wall elevations	
					Verify footing does on conflict with utility crossing	
					Any special finishes on the wall; if so, special provision included?	
					Details for each retaining wall design included?	
					Control point for off-set indicated on the detail?	
					Pay limits indicated on detail?	
					If footing is used as sidewalk; did you clarify how payment will measured?	
30%	60%	90%	99%	100%	***WATER MAIN***	
					Existing utilities, all connections to, and crossings of existing utilities shown	
					Meter size, type, and location listed on the plans	
					If you are "relocating" meters & meter box, verify you have proper pay items. See Mods 504S.	
					Verify no existing meters are installed in the sidewalk; if so, add note requiring meter to relocated outside sidewalk.	
					Existing meter sizes labeled with irrigation or residential use (Irrigation meters require Backflow Preventer)	
					Lines shall be looped or an Automatic Flush Valve will be installed	
					Stations called out for Hydrants, Tee's, Valves, Crosses, Bends, etc. (angle of bends included)	
					Bold and label all proposed lines	
					Label all that are to be abandoned	
					Station equation given from street centerline with offset at Match Marks	
					If bores included, show stationing at each end and size of encasement	
					Air Release Valve on 16" or larger lines at all high points	
					Are drain valves needed on 12" or larger lines at all low points?	
					Field verify service size and type.	
					Water department to verify all valves are working. City PM to coordinate	
					Restrained Lengths - Call out all pipe mechanical restraints and provide calculations - required on water lines at all bends and intersections points in accordance with manufacturer recommendation (Ford Uniflange and EBBA Iron Megalugs). May show in profile or plan view.	
					Valves located in an open field need Valve Location Markers (detail included?)	
					All legs of the main at a tee or cross shall have a valve (excludes FH)	
					MUST use cut-in tee if connecting to line of equal size	
					Transmission lines needs a temporary sample port at least every 1000 ft.	
					Fire hydrants located on property line (between properties)	
					Fire Hydrant Spacing Verified: See Table 3 of Water Design Manual	
					300 feet for commercial	
					500 feet for residential	

30%	60%	90%	99%	100%	***DESCRIPTIONS***	***Comments***
					Profile shown for all lines 12" and larger:	
■	■				Top of existing and proposed ground shown	
■	■				Crossing shown of existing and proposed utilities	
■	■				Size, slope, and class of pipe labeled and shown on profile	
■	■				Elevations shown on all grade breaks	
30%	60%	90%	99%	100%	***WASTEWATER MAIN***	
					Wastewater Main **(8"-12")** to be SDR 26, minimum 8" diameter, 150 PSI Pressure Rating **(Do Not Specify ASTM 3034; only ASTM 2241)** See SPL WW-227E	
					Wastewater Main **15"** to be SDR 26, 115 PSI Pressure Rating (ASTM 3034) See SPL WW-227	
					Wastewater Main **18" & Larger** to be 115 PSI Pressure Rating (ASTM F 679) See SPL WW-227A	
					Wastewater Lateral (Service) to be replaced to property line with new cleanout per detail	
					Check location of cleanout boxes (Not in sidewalk or driveway)	
					Service laterals are not permitted on lines 15" or larger. MH required for laterals on 15" and larger.	
					Show existing utilities, all connections, and crossings	
					Station equation given from street centerline with offset at Match Marks	
					Manhole Ring and Cover; do you need to specify bolt down if needed - Detail included	
					Any existing wastewater sample ports within project limits? Check with PM if needed.	
					Stub-out past paving from last manhole if future project planned	
					If tying into existing manhole, include pay item	
					Flow arrows in plan view	
					Bold and label all proposed lines	
					Label all lines that are to be abandoned	
					Manholes located in an open field need location markers (detail included?)	
					Maximum Manhole spacing of 500'	
					Manhole Vent Detail - only for manholes outside of pavement and when several watertight MH are installed; if vent needed for manhole in pavement, need to revise detail with bollards, possible easement area for vent, etc. Max unvented length of main is 1500 feet.	
					By-pass pumping required? If yes, include pay item.	
					Profile shown for all lines:	
■					Profile - Show Pipe size, material, Length and slope	
■					Manhole stations & top of rim elevation called out	
■					Invert elevation called out; include Direction and In/Out at each callout.	
■					Top of existing and proposed ground shown	
■					Elevations shown on all grade breaks	
■					If bores, show stationing and size of encasement at each end	
■					Capacity and velocity shown for peak wet weather flow shown in profile per section ***1.5 Determination of Pipe Size and Slope*** of the wastewater design manual.	
■					Flow rate and velocity for peak dry weather flow in pipes less than 18" shown in profile	
■					Line sizing calculations submitted and approved. Use Flows from Master Plan.	
■					Drop manhole required where incoming pipe invert is more than 24" higher than outgoing pipe invert (Verify large diameter drops will fit). External drop manhole is standard	
■					If requesting internal drop MH; have you received COSM approval?	
30%	60%	90%	99%	100%	***FORCE MAIN***	
					Existing utilities, all connections to, and crossings of existing utilities shown	
					Bold and label all proposed lines	
					Label all that are to be abandoned	
					Station equation given from street centerline with offset	
					If bores included, show stationing at each end and size of encasement	
					Air Release/Vacuum Valve locations required per AWWA M51, most current edition	
■	■				Restrained Lengths - Call out all pipe mechanical restraints and provide calculations - required on water lines at all bends and intersections points in accordance with manufacturer recommendation (Ford Uniflange and EBBA Iron Megalugs). May show in profile or plan view	
■	■				Valves located in an open field need Valve Location Markers (detail included?)	
■	■				Force Main Valve required by TCEQ?	
					Profile shown for all lines:	
■	■				Top of existing and proposed ground shown	
■	■				Crossing shown of existing and proposed utilities	
■	■				Size, slope, and class of pipe labeled and shown on profile	
■	■				Elevations shown on all grade breaks	
30%	60%	90%	99%	100%	***RECLAIMED WATER***	
					Existing utilities, all connections to, and crossings of existing utilities shown	
					Bold and label all proposed lines	
					Label all that are to be abandoned	
					Station equation given from street centerline with offset	
					If bores included, show stationing at each end and size of encasement	
					Air Release/Vacuum Valve required?	
■	■				Restrained Lengths - Call out all pipe mechanical restraints and provide calculations - required on water lines at all bends and intersections points in accordance with manufacturer recommendation (Ford Uniflange and EBBA Iron Megalugs). May show in profile or plan view	
■	■				Valves located in an open field need Valve Location Markers (detail included?)	
■	■				Valves spaced per Water Design Manual?	
					Profile shown for all lines 12" and larger:	
■	■				Top of existing and proposed ground shown	
■	■				Crossing shown of existing and proposed utilities	
■	■				Size, slope, and class of pipe labeled and shown on profile	
■	■				Elevations shown on all grade breaks	
30%	60%	90%	99%	100%	***LIFT STATIONS***	
					Follows COSM Design Criteria Manual on COSM website	
					Pump specification	
					Pump & Guiderail Installation Details	
					Site Plan	
					Erosion Control Plan account for work in Lift Station?	
					Odor Control Analysis	
					Power Supply Analysis	
					Wet & Dry Flow Analysis	
					Bid item for SCADA equipment from COSM supplier (coordinate with Bruce Noel)	
					Comments received from PS Lift Station Maintenance Team (coordinate with Bruce Noel)	

30%	60%	90%	99%	100%	***DESCRIPTIONS***	***Comments***
					Electrical line drawings	
					Instrumentation & Control drawings	
30%	60%	90%	99%	100%	***ELECTRIC - UNDERGROUND***	
					Show existing and proposed pole placement	
					Show primary and secondary pull boxes, transformers	
					Plan and profile of duct bank	
					Duct Bank Detail with backfill shown	
30%	60%	90%	99%	100%	***ELECTRIC - MECHANICAL***	
					Mechanical Plan required?	
30%	60%	90%	99%	100%	***ELECTRIC - LIGHTING***	
					Photometric Plan	
					Show existing and proposed pole placement	
					Show pull boxes - no more than 360 degree for bends allowed between pull boxes	
					Typical section showing trench	
					Light fixture approved by SMEU	
30%	60%	90%	99%	100%	***TRAFFIC SIGNALS***	
					Ped crossing? If yes, APS required	
					Opticom required	
					Contractor must program signal	
					Provided timing and phasing plan	
					Need temporary signals?	
					If yes, provided timing and phasing plan	
					Use TXDOT Specs; not COSM. See Modifications TXDOT 680.	
30%	60%	90%	99%	100%	***SIGNING & PAVEMENT MARKINGS***	
					Make sure you include both Type 1 & Type 2 Striping; see the Modifications (871S)	
					Crosswalk striping matches detail?	
					Sign standard and signs per MUTCD	
					Do we need a detailed striping plan?	
30%	60%	90%	99%	100%	***UTILITY LAYOUT***	
					Utility layout required?	
					Color coded?	
					Label all utilities; proposed and existing.	
30%	60%	90%	99%	100%	***LANDSCAPING***	
					Irrigation system reviewed against irrigation checklist?	
					Irrigation system approved by Jan Klein and Devin Hussey?	
					Irrigation system approved by Parks?	
					Tree/Plans approved by Parks?	
					Do you a have a service drop or will SMEU need to install one?	
					Plans clear on how power and water will be connected?	
					Are you including a 2 year maintenance requirement and pay items?	
30%	60%	90%	99%	100%	***CROSS-SECTIONS***	
					Every 50'?	
					At driveways? Unless you have details profiles	
					Utilities shown in cross-section	
					ROW/Easement Shown	
30%	60%	90%	99%	100%	***DETAILS***	
					All details included in plans; ***fill out checklist on COSM website under "Standard Details"***	
					Edge Protection Required per detail 432S-1-SM?	
30%	60%	90%	99%	100%	***BID ITEMS - COMMON MISSED ITEMS***	***Comments***
					Curb & gutter vs. driveways - don't include C&G area in driveway; curb & gutter paid thru the dwy by LF as laydown. Review Detail 433S-A-SM	
					Included pay item for TV inspection of sanitary sewer? Pay Item TBD	
					Included pay item for TV inspection of storm drain? Pay Item No. 510-VIDEO ~ Video Inspection of Newly Installed Box Culverts and Storm Drain Pipe	
					Wet Connection pay item for all water tie ins? (510S)	
					Service paid by LF and connection by EA OR by Relay Long & Short? Check the Modifications (510S)	
					Which FH pay item was used? Check the Modifications (511S)	
					Asphalt/Concrete/Base quantities follow dimensions of appropriate trench repair detail	
					Bid items list proper thickness corresponding to trench repair detail.	
					If different thickness used; need to modify trench repair detail.	
30%	60%	90%	99%	100%	***External Funded Project***	***Comments***
					CAMPO PROJECTS	
					TXDOT Cover page	
					TXDOT Title Block	
					TXDOT Details (Use COSM details if there is no TXDOT Detail)	
					Pay Items - Use TXDOT Pay items ((Use COSM pay items if there is no TXDOT pay item)	
30%	60%	90%	99%	100%	***MISCELLANEOUS***	
					Construction schedule estimate to justify the number of working days we award for construction. Specify Calendar Day or Working Days.	
					Mailboxes - placement updated to match COSM standard detail 432S-10-SM	
					Mailboxes (Alternative Detail if City Detail Wont Work) - See TXDOT details MB-14 and MB-15 on Maintenance webpage	

GIS Submittal Checklist

Project Details

PROJECT NAME :		
SUBMITTAL DATE:	First Plan Submittal:	XX/XX/20XX
	Construction/ Approved Plan Set:	XX/XX/20XX
	Record Drawing:	XX/XX/20XX
COMPANY SUBMITTING CONTACT INFORMATION:	Company Name:	
	Contact Person:	
	Email:	
	Address:	
	Phone:	

General Requirements For All Submittals

State Plane Coordinates:	NAD 1983 State Plane Texas South Central FIPS 4204 Feet
Coordinate Geometry	Grid (No Surface Files)
CAD Software	DWG (No DGN)
CAD Version	2013 or Newer
CAD Base Files	2-D only (No Civil 3-D files & No "xrefs")
GPS Survey Data	The survey points file (P, N, E, Z, D) in a CSV format. P=Point, N=Northing, E=Easting, Z=Elevation, D=Description

Deliverables

Submittal Type ● = Required N/A = NOT APPLICABLE			**Item To Submit**	**COMMENTS**
First Plan Submittal:	Construction/ Approved Plan set:	Record Drawing:		
●	N/A	N/A	Surveyor Certification For Design Data - See Template	This is for the design survey. A letter from the surveyor stating what coordinate system the survey was referenced to; both vertically and horizontally.
N/A	N/A	●	Surveyor Certification For Record Drawing - See Template	This is for the separate post construction survey. A letter from the surveyor stating what coordinate system the survey was referenced to; both vertically and horizontally
●	●	●	CAD Drawing	CAD Files must be updated to reflect revised location of attributes as determined by the record drawing survey.
●	●	●	PDF of Drawing	Record Drawings must be updated to reflect revised location of attributes as determined by the record drawing survey.
N/A	N/A	●	One 22X34 Hard Copy (Inspector Approved)	
N/A	N/A	●	One 11X17 Hard Copy (Inspector Approved)	
N/A	N/A	●	GPS Survey Data in a csv format. Include Index of descriptions	locations of assets as built

Record Drawing Survey Requirements

Instructions: All Installed Items Listed Must Be Re-surveyed After Construction is Completed.
~ Please indicate if the attribute was installed with your scope or if these attributes are not part your scope.
~ Existing attributes that where not installed under this scope of work do not need to be re-surveyed

N/A = Not Applicable X = Included	***Items To Survey*** ***GPS Survey Points at the Centroid of Structure***	***COMMENTS***
	Water - Hydrant	
	Water - Meter	
	Water - Sample Site	
	Water - Valve - Air, Altitude, Automatic Flush, Ball, Blow Off, Butterfly, Check, Combination Air Release, Cone, Fire Hydrant, Gate, Manual Flush, Plug, Pressure Reducing, Vacuum Breaker	
	Wastewater - Access Points - WAD, Clean Out	
	Wastewater - Manholes Lid	
	Wastewater - Manholes Rim and Inverts (In & Out)	
	Wastewater - Sample Port	
	Wastewater - Valve	
	Storm Sewer - Inlet Lid (Slot Drain, Trench Drain, Area, Curb, Double Sided, Four Sided)	
	Storm Sewer - Culverts (Upstream and downstream elevations)	
	Storm Sewer - Inlet Rim and Inverts (In & Out)	
	Storm Sewer - Junction Box/Manhole Rim and Inverts (In & Out)	

Layer Name Information

Instructions: All items Listed Must Be Shown In the CAD Files. **Combine all CAD files into a single DWG file showing the attributes listed below.**
~ Please indicate if the attribute is included in your files or if these attributes is not part your scope.
~ If included, please indicate how the layer is identified in your CAD file

N/A = Not Applicable X = Included	*ATTRIBUTE- as named in COSM GIS System*	*ATTRIBUTE - As named in your CAD file. Which Layer is it on?*
	Base File Attributes	
	Site Boundary	
	Parcels	
	Right of Way	
	Existing Easements	
	Proposed Easements	
	Street Centerline	
	Pavement Back of Curb	
	Edge of Pavement	
	Sidewalks	
	Building Footprints	
	Floodplain Delineation	
	Water Attributes	
	Fitting - Cap, Cross, Reducer, Tap, Tee	
	Hydrant	
	Meter	
	Sample Site	
	Service Line	
	Storage Tank	
	Valve - Air, Altitude, Automatic Flush, Ball, Blow Off, Butterfly, Check, Combination Air Release, Cone, Fire Hydrant, Gate, Manual Flush, Plug, Pressure Reducing, Vacuum Breaker	
	Water main	
	Well	
	Wastewater Attributes	
	Access Points - WAD, Clean Out	
	Cap	
	Lift Station	
	Mains	
	Manhole	
	Sample Port	
	Service Line	
	Treatment Plant	
	Valve	
	Storm Sewer Attributes	
	Channel	
	Culvert	
	Inlet - Slot Drain, Trench Drain, Area, Curb, Double Sided, Four Sided	
	Junction Box/Manhole	
	Outfall	
	Rip Rap	
	Storm Sewer Pipes	
	Lateral Lines	
	Water Quality and Storage - (Example: Bioswale, Detention, Greenroof, Modular Wetland, Permeable Pavers, Rain Garden, Retention, Wetland)	

Created By Freese and Nichols, Inc.
Job No.: SAM22698
Location: H:\W_WW_PLANNING\01_DELIVERABLES\02_WWTP_Siting_Study\WWTP_Siting_Study.aprx
Updated: Wednesday, May 31, 2023 11:47 AM
User Name: 08166

CITY OF SAN MARCOS

PROPOSED SEDONA WWTP
SHORT-TERM ALTERNATIVE 2

LEGEND

- Lift Station
- Proposed Lift Station
- Manhole
- Proposed Wastewater Treatment Plant
- 8" and Smaller Gravity Main
- Proposed Force Main
- 10" and Larger Gravity Main
- Wastewater CCN
- 8" and Smaller Force Main
- Parcel
- 10" and Larger Force Main
- Road

FREESE AND NICHOLS

THE CITY OF SAN MARCOS

Cottonwood Creek Lift Station (LS51)

REDWOOD RD

FM 110

HWY 123

Attachment D
Survey & Environmental Scoping

2.9 acre area topographic survey corridor and Environmental review

Cottonwood Creek Subdivision Lift Station (LS24)
Expansion to 2.9 MGD

Preliminary Gravity Interceptor alignment

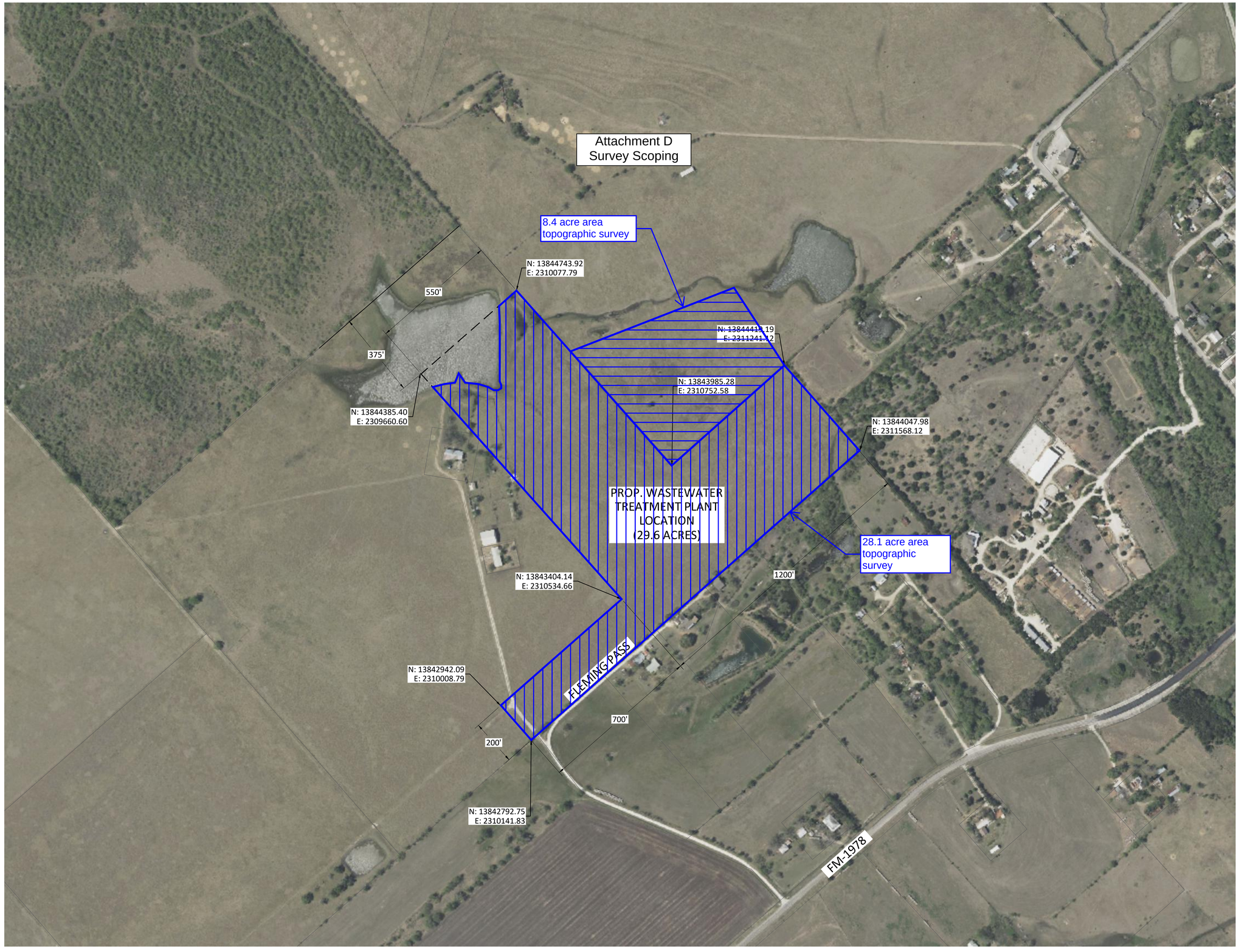
6,200' long, 60' wide topographic survey corridor and Environmental review

12" F.M.

Long-term WWTP (No temporary treatment)

WWTP

0 800
SCALE IN FEET



Freese and Nichols, Inc.
Texas Registered Engineering Firm F-2144

FREESE NICHOLS
1251 Sadler Drive, Building 1
Suite 1150
San Marcos, Texas 78666
Phone - (512) 213-3200
Web - www.freese.com

CITY OF SAN MARCOS
SEDONA WASTEWATER TREATMENT
PLANT PROPOSED LOCATION
CIVIL
WASTEWATER TREATMENT PLAN LOCATION

NO.	ISSUE	BY	DATE

F&N JOB NO. -
DATE 9/19/2023
DESIGNED EK
DRAWN EL
REVISED
CHECKED EK
FILE NAME G-1.dwg

VERIFY SCALE Bar is one inch on original drawing. If not one inch on this sheet, adjust scale.
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SHEET G-1
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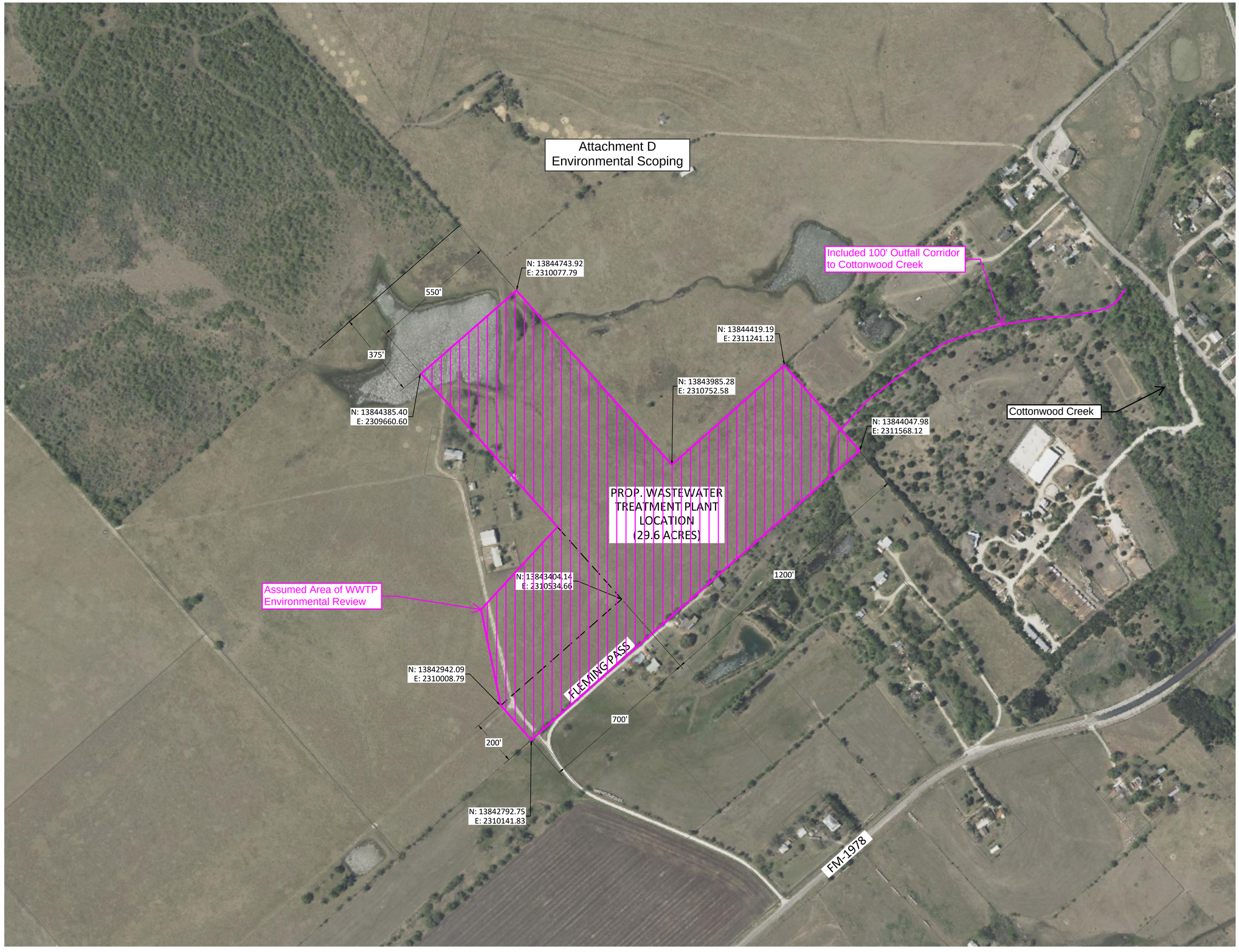

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CITY OF SAN MARCOS

SEDONA WASTEWATER TREATMENT PLANT PROPOSED LOCATION

CIVIL

WASTEWATER TREATMENT PLAN LOCATION

F&N JOB NO. -
DATE 9/19/2023
DESIGNED EK
DRAWN EL
REVISED
CHECKED EK

NO.	ISSUE	BY	DATE

FILE NAME G-1.dwg

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City of San Marcos
LS 24 Upgrades and Package Wastewater Treatment Plant
10/9/2023
Detailed Cost Breakdown

Project Fee Summary		
Basic Services	$	1,642,093
Supplemental Services	$	953,778
Total Project	$	2,595,871

Task Description	Charles Kucherka	Collin Brewer	Blake Stelzer	Cassie Grady	Eric Love	Marissa Mendoza	Mike Hagen	Richard Provolt	Russ Springer	John Rinacke	Rebecca Sandoval	Robert Harrison	Argali Moctezuma	Janet Frantz	Will Huff
	Senior Advisor	Engineer IV	Engineer II	BIM/CAD Designer II	BIM/CAD Technician III	Lead Operations Analyst	LS QC	Construct. QC	Geotech. QC	Estimator	Electrical QC	Engineer VI	Engineer III	BIM/CAD Supervisor	Drainage QC
	$234	$173	$155	$172	$139	$165	$267	$254	$234	$173	$234	$234	$155	$172	$200
Project Level Management & Quality Assurance															
Internal Kickoff Meeting	2	2	2									2	2		
External Kickoff Meeting	2	2	2									2	2		
Periodic Internal Meetings (12 Month Duration)	4	12	12	6								12	12		
Periodic Client Meetings (Bi-Weekly x 12 Month Duration)	4	12	12												
External Stakeholder Meetings	2	2	2												
Coordination with PDB Team (up to 6 Mtgs)	2	18	12												
Maintain and Monitor Scope / Schedule / Budget (28 months)		40													
One Page Reports & Periodic Client Communications (28 months)		10	16												
Corporate Support (Scheduler)			10												
Corporate Support (Operations Analyst, Accounting Specialist, Contract Administrator) (28 months)						28									
Project Scoping, Preparation and Setup	6	70	4			6					2	8			
Project Closeout			4			3									
Contract Preparation for Subconsultants		6				2									
Maintain Project Decision/Issues Log		4	16												
Prepare and Maintain Entity/Utility Coordination Log		4	8												
Develop/Maintain QA Plan, QA Reviews	2	12													
Senior Advisor	8														
Flow Projection and Hydraulic Analysis															
Development Projections															
Capacity Evaluation and Improvement Triggers															
Improvement Alternatives															
Prepare Draft and Final Technical Memorandum															
Preliminary Engineering															
Bid Package 1 - LS 24 Upgrades															
Hydraulics Analysis		18	12												
Pump Sizing	1	18	10												
Electrical Evaluation & Improvements		2	2								2	16	16		
AACE Class 4 OPCC		4	4							8		4	8		
Prepare Draft and Final Technical Memorandum	2	20	18								2	8	16		
Bid Package 2 - Temporary WWTP															
Develop Design Basis & Alternatives Analysis															
Prepare Draft and Final Technical Memorandum	4	8									2	8	16	4	
AACE Class 4 OPCC		4								12		4	8		
Receiving Stream Flood and Erosion Assessment															
Data Collection & Field Work															12
Prepare Draft and Final Technical Memorandum		2													32
36" Gravity Interceptor - Routing Study															
Field Survey and Coordination		4	4												
Route Study and Plan & Profile Schematic Exhibits		20	24	48	70										
Class 4 OPCC		2	4							4					
Prepare Draft and Final Technical Memorandum	2	12	16												
Develop Exhibits and Tracking for Easements and Metes and Bounds		6	6	2	2										
Proposed Easements (up to 4) + Coordination and CAD Verification		16	10	4	4										
Preliminary Engineering Review Workshop	2	2	2									2	2		
30% Design (Bid Package 1 - LS 24 Upgrades)															
Site Visit(s)	2	2	2									4	4		
Review of Geotechnical Data & Record Data															
Field Survey and Coordination		2	2		2										
Utility Coordination/Meetings with Stakeholders	1	2	2									4	4		
Hydraulics Analysis	1	4	4												
Existing Force Main Transient Analysis		2	2												
30% Design Plans	2	18	26	30	70							16	20	24	
Cost Estimating		4	4							4		4	6		
30% Design Submittal to Client															
Pre-Submittal Coordination Set and Review		4	4												
Submittal Preparation for QC		8	8												
Quality Control Review by FNI	4										8				
Address Comments and Submit Draft to City		4	6									4	6		
30% Design Workshop, including Meeting Materials & Minutes	2	4	4									4			
90% Design (Bid Package 1 - LS 24 Upgrades)															
Utility Coordination/Meetings with Stakeholders	1	2	2									6	6		
90% Design Plans	2	20	20	30	70							22	50	24	
90% Project Specifications	2	20	26									16	24		
Cost Estimating	1	4	4							4		4	6		
90% Submittal to Client															
Pre-Submittal Coordination Set and Review		4	6												
Submittal Preparation for QC		4	6												
Quality Control Review by FNI	6	2	2								8				

City of San Marcos LS 24 Upgrades and Package Wastewater Treatment Plant 10/9/2023 Detailed Cost Breakdown	Project Fee Summary		
	Basic Services	$	1,642,093
	Supplemental Services	$	953,778
	Total Project	$	2,595,871

Task Description	Charles Kucherka	Collin Brewer	Blake Stelzer	Cassie Grady	Eric Love	Marissa Mendoza	Mike Hagen	Richard Provolt	Russ Springer	John Rinacke	Rebecca Sandoval	Robert Harrison	Argali Moctezuma	Janet Frantz	Will Huff
	Senior Advisor	Engineer IV	Engineer II	BIM/CAD Designer II	BIM/CAD Technician III	Lead Operations Analyst	LS QC	Construct. QC	Geotech. QC	Estimator	Electrical QC	Engineer VI	Engineer III	BIM/CAD Supervisor	Drainage QC
	$234	$173	$155	$172	$139	$165	$267	$254	$234	$173	$234	$234	$155	$172	$200
Address Comments and Submit Draft to City		4	6									4	4	6	
90% Design Workshop, including Meeting Materials & Minutes	2	4	6									2			
100% Design (Bid Package 1 - LS 24 Upgrades)															
TCEQ and Utility Permitting/Coordination		4	4												
100% Design Plans	2	10	12	10	12							16	26	24	
100% Project Specifications	2	18	20									12	16		
Cost Estimating		4	4							4		4	4		
100% Signed and Sealed Submittal		4	8	8	16										
Bid Phase (Bid Package 1 - LS 24 Upgrades)															
Pre-Bid Meeting and Preparation	1	2	2												
Attend Bid Opening		2	2												
Prepare Addenda		2	4									3	3	3	
Prepare Cost Evaluation Letter and RoA Letter		2	2												
Construction Phase (Bid Package 1 - LS 24 Upgrades)															
General Coordination w/ City & Contractor		2	2												
Prepare Conformed Construction Documents: Submit 1 - PDF, 5 - 11"x17" Plans (30 sheets); 1 - PDF and 3 - Specifications (300 sheets)		2	6	4	8							2	2	4	
Review Submittals	4	6	16									10	18		
Review Lab, Shop & Mill Test Rpts		2	2												
Review O&M Manual & Revise Specs as Necessary		1	1									2	4		
Respond to Contr. RFIs (Assume 5)		8	12									4	8		
Review Alterations. Prepare RFPs, COs - 3 total		4	8	4								4	8	4	
Coordination of Construction Related Challenges	2	4	8					4							
Meeting and Site Visits															
Pre-Construction Conference		2	2												
Construction Meetings via Video-Conference; including agenda and meeting minutes (4 total)	2	8	8												
Site Visits (2 total) Including documentation, agendas, meeting minutes and follow up time. 2 hours per visit.	2	4	4									2	2		
Substantial Completion Meeting	1	1	2									2	2		
Final Completion Meeting	1	1	2												
Testing and Start-Up Meeting	1	2	2									2	2		
1-Year Warranty Inspection and Follow Up Visit		1	1									2			
Certification of Project Construction & TCEQ Coordination		1	1												
Record Drawings (Electronic)		2	4	6	8							2	2	4	
30% Design (Bid Package 2 - Package WWTP)															
Site Visit(s)															
Utility Coordination/Meetings with Stakeholders															
Develop Scope for Geotechnical Engineering & QC		2							8						
Field Survey and Coordination		4													
Internal Coordination Meetings (8)												4			
30% Design Plans		4	4								3	14	48	32	
30% Specifications												5	16		
Cost Estimating										12		2	4		
Stormwater/Drainage Design															
Hydrologic & Hydraulic Impact Assessment & Memo															
Erosion Hazard Zone Development															
Environmental and Cultural Coordination															
Draft Environmental Memorandum															
30% Design Submittal to Client															
Pre-Submittal Coordination Set and Review		8	8												
Submittal Preparation for QC															
Quality Control Review by FNI								8			12				16
Address Comments and Submit Draft to City												4	4	4	
30% Design Workshop, including Meeting Materials & Minutes		2										2	2		
TPDES Permitting (Coordination with Developer's Permit Consultant)															
Coordination Meetings (2)															
Provide Information for Inclusion in Permit App															
Address Q/A															
90% Design (Bid Package 2 - Package WWTP)															
Utility Coordination/Meetings with Stakeholders												4	4		
Update Hydrologic & Hydraulic Impact Assessment & Memo															
Prepare SWPPP															
Prepare Floodplain Development Permit & Watershed Protection Plan Permits		8													
Site Preparation Permit		8													
90% Design Plans		2										16	72	48	
90% Project Specifications												8	32		
Cost Estimating										16		4	8		

City of San Marcos LS 24 Upgrades and Package Wastewater Treatment Plant 10/9/2023 Detailed Cost Breakdown	Project Fee Summary		
	Basic Services	$	1,642,093
	Supplemental Services	$	953,778
	Total Project	$	2,595,871

Task Description	Charles Kucherka	Collin Brewer	Blake Stelzer	Cassie Grady	Eric Love	Marissa Mendoza	Mike Hagen	Richard Provolt	Russ Springer	John Rinacke	Rebecca Sandoval	Robert Harrison	Argali Moctezuma	Janet Frantz	Will Huff
	Senior Advisor	Engineer IV	Engineer II	BIM/CAD Designer II	BIM/CAD Technician III	Lead Operations Analyst	LS QC	Construct. QC	Geotech. QC	Estimator	Electrical QC	Engineer VI	Engineer III	BIM/CAD Supervisor	Drainage QC
	$234	$173	$155	$172	$139	$165	$267	$254	$234	$173	$234	$234	$155	$172	$200
Internal Coordination Meetings (8)		4										4	4		
90% Design Submittal to Client															
Pre-Submittal Coordination Set and Review		4													
Submittal Preparation for QC															
Quality Control Review by FNI	4							8			8				8
Address Comments and Submit Draft to City												4	8	8	
90% Design Workshop, including Meeting Materials & Minutes	2											2	2		
100% Design (Bid Package 2 - Package WWTP)															
TCEQ and Utility Permitting/Coordination												2	4		
100% Design Plans		4										6	12	24	
100% Project Specifications		4										4	8		
Cost Estimating										16		2	4		
100% Signed and Sealed Submittal												4	4	4	
Bid Phase (Bid Package 2 - Package WWTP)															
Prepare Pre-Bid Presentation		2													
Prepare Agenda and Attend Pre-Bid Meeting		2	2									2	2		
Attend Bid Opening															
Prepare Addenda												2	4	4	
Prepare Cost Evaluation Letter and RoA Letter															
Construction Phase (Bid Package 2 - Package WWTP)															
General Coordination w/ City & Contractor															
Prepare Conformed Construction Documents: Submit 1 - PDF, 5 - 11"x17" Plans (100 sheets); 1 - PDF and 3 - Specifications (900 sheets)															
Review Submittals (~~125 assumed~~)(40 Assumed)												8	24		
Respond to Contr. RFIs (Assume 20)													8		
Coordination of Construction Related Challenges								4							
Meeting and Site Visits															
Pre-Construction Conference		2										2	2		
Bi-Weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (24 total)															
Site Visits (10 total) Including documentation, agendas, meeting minutes and follow up time. 2 hours per visit.												4	4		
Misc. Project Review and Coordination Meetings												2	4		
Substantial Completion Meeting													2		
Final Completion Meeting													2		
Testing and Start-Up Meeting													2		
1-Year Warranty Inspection and Follow Up Visit															
Prepare Draft/Final Record Drawings (Electronic)															
Supplemental Services															
Supplemental Technical Services	90	260	260	210	220						90	240	260	100	40
Total Hours / Quantity	**183**	**869**	**767**	**362**	**482**	**39**	**-**	**30**	**8**	**80**	**137**	**574**	**859**	**321**	**108**
Total Effort	**$ 45,093**	**$ 158,113**	**$ 125,240**	**$ 65,617**	**$ 70,407**	**$ 6,759**	**$ -**	**$ 8,031**	**$ 1,947**	**$ 14,509**	**$ 33,783**	**$ 141,707**	**$ 140,379**	**$ 58,115**	**$ 22,630**

City of San Marcos
LS 24 Upgrades and Package Wastewater Treatment Plant
10/9/2023
Detailed Cost Breakdown

Task Description	Labor														
	Sarah West	Blaine Laechelin	Parker Kallman	George Fowler	Elise Arceneaux	Emily Brown	Ian Jewell	Bryan Dick	Noe Ortiz	Brad Watson	Masoud Ghahremannejad	Bailey Watson	Miguel Marroquin	Josh Moore	Julia Whitcraft
	Engineer VI	Engineer V	Engineer II	Engineer V	Engineer II	Engineer V	Environmental Scientist VII	Group Manager	BIM/CAD Designer II	Structural QC	Engineer VI	Engineer IV	Engineer I	BIM/CAD Designer I	BIM/CAD Supervisor
	$234	$234	$155	$234	$155	$200	$234	$267	$172	$267	$234	$173	$155	$139	$172
Project Level Management & Quality Assurance															
Internal Kickoff Meeting	2	2	2							2	2	2	2	2	2
External Kickoff Meeting															
Periodic Internal Meetings (12 Month Duration)	12	6	6								12	6	12		
Periodic Client Meetings (Bi-Weekly x 12 Month Duration)															
External Stakeholder Meetings															
Coordination with PDB Team (up to 6 Mtgs)															
Maintain and Monitor Scope / Schedule / Budget (28 months)															
One Page Reports & Periodic Client Communications (28 months)															
Corporate Support (Scheduler)															
Corporate Support (Operations Analyst, Accounting Specialist, Contract Administrator) (28 months)															
Project Scoping, Preparation and Setup		4								2		4			
Project Closeout															
Contract Preparation for Subconsultants															
Maintain Project Decision/Issues Log															
Prepare and Maintain Entity/Utility Coordination Log															
Develop/Maintain QA Plan, QA Reviews															
Senior Advisor															
Flow Projection and Hydraulic Analysis															
Development Projections															
Capacity Evaluation and Improvement Triggers															
Improvement Alternatives															
Prepare Draft and Final Technical Memorandum															
Preliminary Engineering															
Bid Package 1 - LS 24 Upgrades															
Hydraulics Analysis															
Pump Sizing															
Electrical Evaluation & Improvements															
AACE Class 4 OPCC											2	2	2		
Prepare Draft and Final Technical Memorandum											2	2	2		
Bid Package 2 - Temporary WWTP															
Develop Design Basis & Alternatives Analysis															
Prepare Draft and Final Technical Memorandum				8	16				8		4	4	4		
AACE Class 4 OPCC															
Receiving Stream Flood and Erosion Assessment															
Data Collection & Field Work			4	12											
Prepare Draft and Final Technical Memorandum			50	14	16	16	6	4							
36" Gravity Interceptor - Routing Study															
Field Survey and Coordination															
Route Study and Plan & Profile Schematic Exhibits															
Class 4 OPCC															
Prepare Draft and Final Technical Memorandum															
Develop Exhibits and Tracking for Easements and Metes and Bounds															
Proposed Easements (up to 4) + Coordination and CAD Verification															
Preliminary Engineering Review Workshop											2	2	2		
30% Design (Bid Package 1 - LS 24 Upgrades)															
Site Visit(s)															
Review of Geotechnical Data & Record Data										2		4	4		
Field Survey and Coordination															
Utility Coordination/Meetings with Stakeholders															
Hydraulics Analysis															
Existing Force Main Transient Analysis															
30% Design Plans												6	12	16	
Cost Estimating												4	8		
30% Design Submittal to Client															
Pre-Submittal Coordination Set and Review															
Submittal Preparation for QC															
Quality Control Review by FNI										8					
Address Comments and Submit Draft to City												2	4	4	
30% Design Workshop, including Meeting Materials & Minutes												2			
90% Design (Bid Package 1 - LS 24 Upgrades)															
Utility Coordination/Meetings with Stakeholders															
90% Design Plans												10	14	22	
90% Project Specifications												4	8		
Cost Estimating												2	4		
90% Submittal to Client															
Pre-Submittal Coordination Set and Review															
Submittal Preparation for QC															
Quality Control Review by FNI										6					

City of San Marcos
LS 24 Upgrades and Package Wastewater Treatment Plant
10/9/2023
Detailed Cost Breakdown

Task Description	Labor														
	Sarah West	Blaine Laechelin	Parker Kallman	George Fowler	Elise Arceneaux	Emily Brown	Ian Jewell	Bryan Dick	Noe Ortiz	Brad Watson	Masoud Ghahremannejad	Bailey Watson	Miguel Marroquin	Josh Moore	Julia Whitcraft
	Engineer VI	Engineer V	Engineer II	Engineer V	Engineer II	Engineer V	Environmental Scientist VII	Group Manager	BIM/CAD Designer II	Structural QC	Engineer VI	Engineer IV	Engineer I	BIM/CAD Designer I	BIM/CAD Supervisor
	$234	$234	$155	$234	$155	$200	$234	$267	$172	$267	$234	$173	$155	$139	$172
Address Comments and Submit Draft to City												4	4	6	
90% Design Workshop, including Meeting Materials & Minutes												2			
100% Design (Bid Package 1 - LS 24 Upgrades)															
TCEQ and Utility Permitting/Coordination															
100% Design Plans											8	12	16	20	
100% Project Specifications												4			
Cost Estimating												4			
100% Signed and Sealed Submittal												4			
Bid Phase (Bid Package 1 - LS 24 Upgrades)															
Pre-Bid Meeting and Preparation															
Attend Bid Opening															
Prepare Addenda															
Prepare Cost Evaluation Letter and RoA Letter															
Construction Phase (Bid Package 1 - LS 24 Upgrades)															
General Coordination w/ City & Contractor															
Prepare Conformed Construction Documents: Submit 1 - PDF, 5 - 11"x17" Plans (30 sheets); 1 - PDF and 3 - Specifications (300 sheets)												2	2	4	
Review Submittals										2		8	8		
Review Lab, Shop & Mill Test Rpts												4	4		
Review O&M Manual & Revise Specs as Necessary															
Respond to Contr. RFIs (Assume 5)										2		2	2		
Review Alterations. Prepare RFPs, COs - 3 total												2	2		
Coordination of Construction Related Challenges															
Meeting and Site Visits															
Pre-Construction Conference															
Construction Meetings via Video-Conference; including agenda and meeting minutes (4 total)															
Site Visits (2 total) Including documentation, agendas, meeting minutes and follow up time. 2 hours per visit.															
Substantial Completion Meeting															
Final Completion Meeting															
Testing and Start-Up Meeting															
1-Year Warranty Inspection and Follow Up Visit															
Certification of Project Construction & TCEQ Coordination															
Record Drawings (Electronic)												2	2	4	
30% Design (Bid Package 2 - Package WWTP)															
Site Visit(s)															
Utility Coordination/Meetings with Stakeholders															
Develop Scope for Geotechnical Engineering & QC															
Field Survey and Coordination															
Internal Coordination Meetings (8)		4		4							4				
30% Design Plans	8	8	32						24		8	12	16	24	8
30% Specifications											2	4	4		
Cost Estimating	2	2	6								2	4	4		
Stormwater/Drainage Design	2	8	24												
Hydrologic & Hydraulic Impact Assessment & Memo	12	32	40												
Erosion Hazard Zone Development	2	4	8												
Environmental and Cultural Coordination															
Draft Environmental Memorandum	1	1	2												
30% Design Submittal to Client															
Pre-Submittal Coordination Set and Review															
Submittal Preparation for QC															
Quality Control Review by FNI										8					
Address Comments and Submit Draft to City	1	2	8						6		2	2	2	8	4
30% Design Workshop, including Meeting Materials & Minutes		2													
TPDES Permitting (Coordination with Developer's Permit Consultant)															
Coordination Meetings (2)															
Provide Information for Inclusion in Permit App															
Address Q/A															
90% Design (Bid Package 2 - Package WWTP)															
Utility Coordination/Meetings with Stakeholders															
Update Hydrologic & Hydraulic Impact Assessment & Memo	4	12	16												
Prepare SWPPP	2	2	8												
Prepare Floodplain Development Permit & Watershed Protection Plan Permits	6	6	10												
Site Preparation Permit	6	6	10												
90% Design Plans	12	24	40						40		24	24	36	64	16
90% Project Specifications	2	4	8								8	12	16		
Cost Estimating		1	4								4	4			

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Task Description	Labor														
	Sarah West	Blaine Laechelin	Parker Kallman	George Fowler	Elise Arceneaux	Emily Brown	Ian Jewell	Bryan Dick	Noe Ortiz	Brad Watson	Masoud Ghahremannejad	Bailey Watson	Miguel Marroquin	Josh Moore	Julia Whitcraft
	Engineer VI	Engineer V	Engineer II	Engineer V	Engineer II	Engineer V	Environmental Scientist VII	Group Manager	BIM/CAD Designer II	Structural QC	Engineer VI	Engineer IV	Engineer I	BIM/CAD Designer I	BIM/CAD Supervisor
	$234	$234	$155	$234	$155	$200	$234	$267	$172	$267	$234	$173	$155	$139	$172
Internal Coordination Meetings (8)		4									4	4			
90% Design Submittal to Client															
Pre-Submittal Coordination Set and Review															
Submittal Preparation for QC															
Quality Control Review by FNI										8					
Address Comments and Submit Draft to City	2	2	8						8		4	4	4	8	
90% Design Workshop, including Meeting Materials & Minutes		2									2				
100% Design (Bid Package 2 - Package WWTP)															
TCEQ and Utility Permitting/Coordination															
100% Design Plans	4	4	12						16	4	8	8	8	12	8
100% Project Specifications											4	4	4		
Cost Estimating		2	4								2	2	2		
100% Signed and Sealed Submittal	2	2	2								2	2	2		
Bid Phase (Bid Package 2 - Package WWTP)															
Prepare Pre-Bid Presentation															
Prepare Agenda and Attend Pre-Bid Meeting															
Attend Bid Opening															
Prepare Addenda											2	4		4	
Prepare Cost Evaluation Letter and RoA Letter															
Construction Phase (Bid Package 2 - Package WWTP)															
General Coordination w/ City & Contractor															
Prepare Conformed Construction Documents: Submit 1 - PDF, 5 - 11"x17" Plans (100 sheets); 1 - PDF and 3 - Specifications (900 sheets)											2	2		6	
Review Submittals (~~125 assumed~~)(40 Assumed)											4	8	8		
Respond to Contr. RFIs (Assume 20)										2	4	4			
Coordination of Construction Related Challenges															
Meeting and Site Visits															
Pre-Construction Conference															
Bi-Weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (24 total)															
Site Visits (10 total) Including documentation, agendas, meeting minutes and follow up time. 2 hours per visit.												4			
Misc. Project Review and Coordination Meetings															
Substantial Completion Meeting															
Final Completion Meeting															
Testing and Start-Up Meeting															
1-Year Warranty Inspection and Follow Up Visit															
Prepare Draft/Final Record Drawings (Electronic)															
Supplemental Services															
Supplemental Technical Services	40	40	180	20			40		200	60	80	80	100	180	30
Total Hours / Quantity	**122**	**186**	**484**	**58**	**32**	**16**	**46**	**4**	**302**	**106**	**204**	**294**	**324**	**384**	**68**
Total Effort	**$ 29,921**	**$ 45,511**	**$ 78,668**	**$ 14,212**	**$ 5,158**	**$ 3,328**	**$ 11,389**	**$ 1,111**	**$ 54,852**	**$ 29,901**	**$ 50,392**	**$ 53,691**	**$ 52,884**	**$ 56,226**	**$ 12,332**

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Task Description	Tom Dixon	Tam Tran	Avery Mottet	Brian King	Kelsey Calvez	Jake Heimann	Junior Henson	Scott Vaughan	Caleb Barlow	Jaqueline Miranda	Jesse Ellis	Tom Hill	Ethan Shires	Stephanie Neises	Kendall King
	Environmental Scientist VII	Environmental Scientist IV	Environmental Scientist I	Lead GIS Analyst	Environmental Scientist IV	Construction Manager III	Construction Representative IV	Mechanical QC	Mechanical	Mechanical	Trans. Analysis	Trans. Analysis	Master Planning	Master Planning	WWTP PM
	$234	$173	$127	$200	$173	$148	$185	$200	$173	$155	$155	$267	$200	$267	$267
Project Level Management & Quality Assurance															
Internal Kickoff Meeting									2	2			2	2	2
External Kickoff Meeting															2
Periodic Internal Meetings (12 Month Duration)									12	12	2	2	6	2	12
Periodic Client Meetings (Bi-Weekly x 12 Month Duration)															12
External Stakeholder Meetings															4
Coordination with PDB Team (up to 6 Mtgs)															12
Maintain and Monitor Scope / Schedule / Budget (28 months)															12
One Page Reports & Periodic Client Communications (28 months)															12
Corporate Support (Scheduler)															
Corporate Support (Operations Analyst, Accounting Specialist, Contract Administrator) (28 months)															
Project Scoping, Preparation and Setup	4														30
Project Closeout															2
Contract Preparation for Subconsultants															
Maintain Project Decision/Issues Log															4
Prepare and Maintain Entity/Utility Coordination Log															4
Develop/Maintain QA Plan, QA Reviews															
Senior Advisor															
Flow Projection and Hydraulic Analysis															
Development Projections													16	8	
Capacity Evaluation and Improvement Triggers													60	12	
Improvement Alternatives													16	8	
Prepare Draft and Final Technical Memorandum													40	16	
Preliminary Engineering															
Bid Package 1 - LS 24 Upgrades															
Hydraulics Analysis															
Pump Sizing															
Electrical Evaluation & Improvements															
AACE Class 4 OPCC															
Prepare Draft and Final Technical Memorandum															
Bid Package 2 - Temporary WWTP															
Develop Design Basis & Alternatives Analysis															12
Prepare Draft and Final Technical Memorandum	4	8	12												12
AACE Class 4 OPCC															4
Receiving Stream Flood and Erosion Assessment															
Data Collection & Field Work															
Prepare Draft and Final Technical Memorandum				2											
36" Gravity Interceptor - Routing Study															
Field Survey and Coordination															
Route Study and Plan & Profile Schematic Exhibits															
Class 4 OPCC															
Prepare Draft and Final Technical Memorandum															
Develop Exhibits and Tracking for Easements and Metes and Bounds															
Proposed Easements (up to 4) + Coordination and CAD Verification															
Preliminary Engineering Review Workshop															
30% Design (Bid Package 1 - LS 24 Upgrades)															
Site Visit(s)															
Review of Geotechnical Data & Record Data															
Field Survey and Coordination															
Utility Coordination/Meetings with Stakeholders															
Hydraulics Analysis															
Existing Force Main Transient Analysis											32	8			
30% Design Plans															
Cost Estimating															
30% Design Submittal to Client															
Pre-Submittal Coordination Set and Review															
Submittal Preparation for QC															
Quality Control Review by FNI															
Address Comments and Submit Draft to City															
30% Design Workshop, including Meeting Materials & Minutes															
90% Design (Bid Package 1 - LS 24 Upgrades)															
Utility Coordination/Meetings with Stakeholders															
90% Design Plans															
90% Project Specifications															
Cost Estimating															
90% Submittal to Client															
Pre-Submittal Coordination Set and Review															
Submittal Preparation for QC															
Quality Control Review by FNI															

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Task Description	Tom Dixon	Tam Tran	Avery Mottet	Brian King	Kelsey Calvez	Jake Heimann	Junior Henson	Scott Vaughan	Caleb Barlow	Jaqueline Miranda	Jesse Ellis	Tom Hill	Ethan Shires	Stephanie Neises	Kendall King
	Environmental Scientist VII	Environmental Scientist IV	Environmental Scientist I	Lead GIS Analyst	Environmental Scientist IV	Construction Manager III	Construction Representative IV	Mechanical QC	Mechanical	Mechanical	Trans. Analysis	Trans. Analysis	Master Planning	Master Planning	WWTP PM
	$234	$173	$127	$200	$173	$148	$185	$200	$173	$155	$155	$267	$200	$267	$267
Address Comments and Submit Draft to City															
90% Design Workshop, including Meeting Materials & Minutes															
100% Design (Bid Package 1 - LS 24 Upgrades)															
TCEQ and Utility Permitting/Coordination															
100% Design Plans															
100% Project Specifications															
Cost Estimating															
100% Signed and Sealed Submittal															
Bid Phase (Bid Package 1 - LS 24 Upgrades)															
Pre-Bid Meeting and Preparation															
Attend Bid Opening															
Prepare Addenda															
Prepare Cost Evaluation Letter and RoA Letter															
Construction Phase (Bid Package 1 - LS 24 Upgrades)															
General Coordination w/ City & Contractor															
Prepare Conformed Construction Documents: Submit 1 - PDF, 5 - 11"x17" Plans (30 sheets); 1 - PDF and 3 - Specifications (300 sheets)															
Review Submittals															
Review Lab, Shop & Mill Test Rpts															
Review O&M Manual & Revise Specs as Necessary															
Respond to Contr. RFIs (Assume 5)															
Review Alterations. Prepare RFPs, COs - 3 total															
Coordination of Construction Related Challenges						2									
Meeting and Site Visits															
Pre-Construction Conference						2									
Construction Meetings via Video-Conference; including agenda and meeting minutes (4 total)						2									
Site Visits (2 total) Including documentation, agendas, meeting minutes and follow up time. 2 hours per visit.						2	2								
Substantial Completion Meeting						1									
Final Completion Meeting						1									
Testing and Start-Up Meeting						1									
1-Year Warranty Inspection and Follow Up Visit						1									
Certification of Project Construction & TCEQ Coordination															
Record Drawings (Electronic)						1									
30% Design (Bid Package 2 - Package WWTP)															
Site Visit(s)															4
Utility Coordination/Meetings with Stakeholders															4
Develop Scope for Geotechnical Engineering & QC															2
Field Survey and Coordination		16	16												
Internal Coordination Meetings (8)		4													4
30% Design Plans									12	16					16
30% Specifications									8	8					8
Cost Estimating									4	8					2
Stormwater/Drainage Design															
Hydrologic & Hydraulic Impact Assessment & Memo															
Erosion Hazard Zone Development															
Environmental and Cultural Coordination		12	48	16	12										
Draft Environmental Memorandum		12	32												
30% Design Submittal to Client															
Pre-Submittal Coordination Set and Review															2
Submittal Preparation for QC															
Quality Control Review by FNI	8							4							
Address Comments and Submit Draft to City															
30% Design Workshop, including Meeting Materials & Minutes															4
TPDES Permitting (Coordination with Developer's Permit Consultant)															
Coordination Meetings (2)															4
Provide Information for Inclusion in Permit App															4
Address Q/A															2
90% Design (Bid Package 2 - Package WWTP)															
Utility Coordination/Meetings with Stakeholders															4
Update Hydrologic & Hydraulic Impact Assessment & Memo															
Prepare SWPPP		8	24												
Prepare Floodplain Development Permit & Watershed Protection Plan Permits		16	16												
Site Preparation Permit															
90% Design Plans									8	12					12
90% Project Specifications									4	4					12
Cost Estimating									2	2					2

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Task Description	Tom Dixon	Tam Tran	Avery Mottet	Brian King	Kelsey Calvez	Jake Heimann	Junior Henson	Scott Vaughan	Caleb Barlow	Jaqueline Miranda	Jesse Ellis	Tom Hill	Ethan Shires	Stephanie Neises	Kendall King
	Environmental Scientist VII	Environmental Scientist IV	Environmental Scientist I	Lead GIS Analyst	Environmental Scientist IV	Construction Manager III	Construction Representative IV	Mechanical QC	Mechanical	Mechanical	Trans. Analysis	Trans. Analysis	Master Planning	Master Planning	WWTP PM
	$234	$173	$127	$200	$173	$148	$185	$200	$173	$155	$155	$267	$200	$267	$267
Internal Coordination Meetings (8)															4
90% Design Submittal to Client															
Pre-Submittal Coordination Set and Review															2
Submittal Preparation for QC															2
Quality Control Review by FNI								8							
Address Comments and Submit Draft to City									2	2					4
90% Design Workshop, including Meeting Materials & Minutes															4
100% Design (Bid Package 2 - Package WWTP)															
TCEQ and Utility Permitting/Coordination															
100% Design Plans									4	4					6
100% Project Specifications									2	2					4
Cost Estimating									2	2					2
100% Signed and Sealed Submittal									2	2					
Bid Phase (Bid Package 2 - Package WWTP)															
Prepare Pre-Bid Presentation															1
Prepare Agenda and Attend Pre-Bid Meeting															1
Attend Bid Opening															
Prepare Addenda															2
Prepare Cost Evaluation Letter and RoA Letter															1
Construction Phase (Bid Package 2 - Package WWTP)															
General Coordination w/ City & Contractor						8									
Prepare Conformed Construction Documents: Submit 1 - PDF, 5 - 11"x17" Plans (100 sheets); 1 - PDF and 3 - Specifications (900 sheets)															
Review Submittals (~~125 assumed~~)(40 Assumed)									4	4					
Respond to Contr. RFIs (Assume 20)									2						4
Coordination of Construction Related Challenges						8	4								4
Meeting and Site Visits															
Pre-Construction Conference						4									2
Bi-Weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (24 total)						24									12
Site Visits (10 total) Including documentation, agendas, meeting minutes and follow up time. 2 hours per visit.						20	8								10
Misc. Project Review and Coordination Meetings						4									4
Substantial Completion Meeting						2									2
Final Completion Meeting						2									2
Testing and Start-Up Meeting						2									2
1-Year Warranty Inspection and Follow Up Visit						2									
Prepare Draft/Final Record Drawings (Electronic)															
Supplemental Services															
Supplemental Technical Services	20					120	90	20	80	100	60	60	80		220
Total Hours / Quantity	**36**	**76**	**148**	**18**	**12**	**209**	**104**	**32**	**150**	**180**	**94**	**70**	**220**	**48**	**517**
Total Effort	**$ 8,868**	**$ 13,674**	**$ 19,548**	**$ 3,744**	**$ 2,159**	**$ 33,330**	**$ 20,512**	**$ 6,739**	**$ 27,439**	**$ 29,465**	**$ 15,349**	**$ 19,776**	**$ 46,109**	**$ 13,340**	**$ 145,980**

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Task Description	Eric Kong	Priscyla Marquez	Milton Arceneaux	Angela Penagos	Coby Gee	Katie Leatherwood	Cassandra Villarreal	Melissa Kinzer	Total Hours	Total Labor Effort
	WWTP Desn Eng	WWTP EIT	BIM CADD Desn II	BIM CADD Tech	WWTP QC	Permitting Lead	Permitting EIT	Permitting GIS		
	$173	$155	$172	$139	$234	$200	$173	$127		
Project Level Management & Quality Assurance									0	$ -
Internal Kickoff Meeting	2	2	2		2	2			48	$ 9,895
External Kickoff Meeting	2	2			2	2			20	$ 4,160
Periodic Internal Meetings (12 Month Duration)	12	12				6			190	$ 38,102
Periodic Client Meetings (Bi-Weekly x 12 Month Duration)	12	12							64	$ 12,617
External Stakeholder Meetings	4	4							18	$ 3,681
Coordination with PDB Team (up to 6 Mtgs)	16	12							72	$ 13,943
Maintain and Monitor Scope / Schedule / Budget (28 months)	6								58	$ 11,725
One Page Reports & Periodic Client Communications (28 months)	6								44	$ 8,878
Corporate Support (Scheduler)									10	$ 1,628
Corporate Support (Operations Analyst, Accounting Specialist, Contract Administrator) (28 months)									28	$ 4,853
Project Scoping, Preparation and Setup	16								156	$ 32,920
Project Closeout									9	$ 1,732
Contract Preparation for Subconsultants									8	$ 1,437
Maintain Project Decision/Issues Log	2								26	$ 4,817
Prepare and Maintain Entity/Utility Coordination Log	2								18	$ 3,515
Develop/Maintain QA Plan, QA Reviews									14	$ 2,672
Senior Advisor									8	$ 1,872
Flow Projection and Hydraulic Analysis									0	$ -
Development Projections									24	$ 5,549
Capacity Evaluation and Improvement Triggers									72	$ 15,812
Improvement Alternatives									24	$ 5,549
Prepare Draft and Final Technical Memorandum									56	$ 12,763
Preliminary Engineering									0	$ -
Bid Package 1 - LS 24 Upgrades									0	$ -
Hydraulics Analysis									30	$ 5,173
Pump Sizing									29	$ 5,094
Electrical Evaluation & Improvements									38	$ 7,642
AACE Class 4 OPCC									34	$ 6,236
Prepare Draft and Final Technical Memorandum									72	$ 13,168
Bid Package 2 - Temporary WWTP									0	$ -
Develop Design Basis & Alternatives Analysis	32	60			8				112	$ 20,708
Prepare Draft and Final Technical Memorandum	32	60	8	16	8	8	8	8	270	$ 49,046
AACE Class 4 OPCC	12	24			4				72	$ 13,254
Receiving Stream Flood and Erosion Assessment									0	$ -
Data Collection & Field Work									28	$ 6,061
Prepare Draft and Final Technical Memorandum									142	$ 27,377
36" Gravity Interceptor - Routing Study									0	$ -
Field Survey and Coordination									8	$ 1,364
Route Study and Plan & Profile Schematic Exhibits									162	$ 26,173
Class 4 OPCC									10	$ 1,724
Prepare Draft and Final Technical Memorandum									30	$ 5,225
Develop Exhibits and Tracking for Easements and Metes and Bounds									16	$ 2,694
Proposed Easements (up to 4) + Coordination and CAD Verification									34	$ 5,784
Preliminary Engineering Review Workshop									16	$ 3,147
30% Design (Bid Package 1 - LS 24 Upgrades)									0	$ -
Site Visit(s)									14	$ 2,787
Review of Geotechnical Data & Record Data	2								12	$ 2,280
Field Survey and Coordination	2								8	$ 1,331
Utility Coordination/Meetings with Stakeholders									13	$ 2,544
Hydraulics Analysis									9	$ 1,608
Existing Force Main Transient Analysis									44	$ 8,062
30% Design Plans									240	$ 40,140
Cost Estimating									34	$ 6,034
30% Design Submittal to Client									0	$ -
Pre-Submittal Coordination Set and Review									8	$ 1,364
Submittal Preparation for QC									16	$ 2,729
Quality Control Review by FNI									20	$ 5,142
Address Comments and Submit Draft to City									30	$ 5,210
30% Design Workshop, including Meeting Materials & Minutes									16	$ 3,184
90% Design (Bid Package 1 - LS 24 Upgrades)									0	$ -
Utility Coordination/Meetings with Stakeholders									17	$ 3,353
90% Design Plans									284	$ 47,738
90% Project Specifications									100	$ 18,048
Cost Estimating									29	$ 5,273
90% Submittal to Client									0	$ -
Pre-Submittal Coordination Set and Review									10	$ 1,687
Submittal Preparation for QC									10	$ 1,687
Quality Control Review by FNI									30	$ 7,340

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Task Description	Eric Kong	Priscyla Marquez	Milton Arceneaux	Angela Penagos	Coby Gee	Katie Leatherwood	Cassandra Villarreal	Melissa Kinzer	Total Hours	Total Labor Effort
	WWTP Desn Eng	WWTP EIT	BIM CADD Desn II	BIM CADD Tech	WWTP QC	Permitting Lead	Permitting EIT	Permitting GIS		
	$173	$155	$172	$139	$234	$200	$173	$127		
Address Comments and Submit Draft to City									38	$ 6,610
90% Design Workshop, including Meeting Materials & Minutes									16	$ 3,020
100% Design (Bid Package 1 - LS 24 Upgrades)									0	$ -
TCEQ and Utility Permitting/Coordination									8	$ 1,364
100% Design Plans									168	$ 29,698
100% Project Specifications									72	$ 13,168
Cost Estimating									24	$ 4,422
100% Signed and Sealed Submittal									40	$ 6,473
Bid Phase (Bid Package 1 - LS 24 Upgrades)									0	$ -
Pre-Bid Meeting and Preparation									5	$ 963
Attend Bid Opening									4	$ 710
Prepare Addenda									15	$ 2,865
Prepare Cost Evaluation Letter and RoA Letter									4	$ 710
Construction Phase (Bid Package 1 - LS 24 Upgrades)									0	$ -
General Coordination w/ City & Contractor									4	$ 710
Prepare Conformed Construction Documents: Submit 1 - PDF, 5 - 11"x17" Plans (30 sheets); 1 - PDF and 3 - Specifications (300 sheets)									36	$ 6,224
Review Submittals									72	$ 13,782
Review Lab, Shop & Mill Test Rpts									12	$ 2,129
Review O&M Manual & Revise Specs as Necessary									8	$ 1,532
Respond to Contr. RFIs (Assume 5)									38	$ 7,149
Review Alterations. Prepare RFPs, COs - 3 total									36	$ 6,641
Coordination of Construction Related Challenges									20	$ 4,015
Meeting and Site Visits									0	$ -
Pre-Construction Conference									6	$ 1,030
Construction Meetings via Video-Conference; including agenda and meeting minutes (4 total)									20	$ 3,664
Site Visits (2 total) Including documentation, agendas, meeting minutes and follow up time. 2 hours per visit.									18	$ 3,487
Substantial Completion Meeting									9	$ 1,777
Final Completion Meeting									5	$ 936
Testing and Start-Up Meeting									10	$ 1,964
1-Year Warranty Inspection and Follow Up Visit									5	$ 1,021
Certification of Project Construction & TCEQ Coordination									2	$ 355
Record Drawings (Electronic)									37	$ 6,420
30% Design (Bid Package 2 - Package WWTP)									0	$ -
Site Visit(s)	4	4			4				16	$ 3,449
Utility Coordination/Meetings with Stakeholders	4								8	$ 1,830
Develop Scope for Geotechnical Engineering & QC	6			4					22	$ 4,520
Field Survey and Coordination	2	2	4	8					52	$ 8,266
Internal Coordination Meetings (8)	8	8	8			4			52	$ 10,716
30% Design Plans	72	100	60	100					621	$ 107,338
30% Specifications	24	48							127	$ 22,653
Cost Estimating	4	8							64	$ 11,656
Stormwater/Drainage Design	4	4	4	4					50	$ 8,961
Hydrologic & Hydraulic Impact Assessment & Memo	2	2				2	1	1	92	$ 18,566
Erosion Hazard Zone Development	2	2							18	$ 3,432
Environmental and Cultural Coordination	1	2				2	1	1	95	$ 15,216
Draft Environmental Memorandum						8	4	4	64	$ 10,107
30% Design Submittal to Client									0	$ -
Pre-Submittal Coordination Set and Review	8	8	4	4					42	$ 7,307
Submittal Preparation for QC	4	4	4	8					20	$ 3,236
Quality Control Review by FNI					8				64	$ 15,309
Address Comments and Submit Draft to City	8	8	8	12					83	$ 14,362
30% Design Workshop, including Meeting Materials & Minutes	8	12			2				34	$ 6,627
TPDES Permitting (Coordination with Developer's Permit Consultant)									0	$ -
Coordination Meetings (2)	4					4	4		16	$ 3,382
Provide Information for Inclusion in Permit App	8	12	8			2	2	4	40	$ 7,220
Address Q/A	8					4			14	$ 2,827
90% Design (Bid Package 2 - Package WWTP)									0	$ -
Utility Coordination/Meetings with Stakeholders	8	8							28	$ 5,458
Update Hydrologic & Hydraulic Impact Assessment & Memo						8	4	4	48	$ 9,385
Prepare SWPPP	4	4	2	8		4	4		70	$ 11,303
Prepare Floodplain Development Permit & Watershed Protection Plan Permits	8	10				8	4	4	96	$ 16,927
Site Preparation Permit	8	10							48	$ 8,676
90% Design Plans	80	120	60	120					830	$ 143,410
90% Project Specifications	24	48							182	$ 33,292
Cost Estimating	8	12							67	$ 12,334

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Task Description	Eric Kong WWTP Desn Eng $173	Priscyla Marquez WWTP EIT $155	Milton Arceneaux BIM CADD Desn II $172	Angela Penagos BIM CADD Tech $139	Coby Gee WWTP QC $234	Katie Leatherwood Permitting Lead $200	Cassandra Villarreal Permitting EIT $173	Melissa Kinzer Permitting GIS $127	Total Hours	Total Labor Effort
Internal Coordination Meetings (8)	8	8	8						52	$ 10,275
90% Design Submittal to Client									0	$ -
Pre-Submittal Coordination Set and Review	8	8	4	4					30	$ 5,298
Submittal Preparation for QC	8	8	8	16					42	$ 7,028
Quality Control Review by FNI					12				56	$ 13,503
Address Comments and Submit Draft to City	8	8	8	12					104	$ 18,570
90% Design Workshop, including Meeting Materials & Minutes	8	12							34	$ 6,754
100% Design (Bid Package 2 - Package WWTP)									0	$ -
TCEQ and Utility Permitting/Coordination	4	8							18	$ 3,266
100% Design Plans	24	32	16	40					256	$ 47,065
100% Project Specifications	16	24							76	$ 14,416
Cost Estimating	4	8							52	$ 9,940
100% Signed and Sealed Submittal	8	12	8	12					68	$ 12,501
Bid Phase (Bid Package 2 - Package WWTP)									0	$ -
Prepare Pre-Bid Presentation	4	4							11	$ 2,082
Prepare Agenda and Attend Pre-Bid Meeting	2	4							15	$ 2,885
Attend Bid Opening	1								1	$ 187
Prepare Addenda	4	4		8					38	$ 6,976
Prepare Cost Evaluation Letter and RoA Letter	2	4							7	$ 1,334
Construction Phase (Bid Package 2 - Package WWTP)									0	$ -
General Coordination w/ City & Contractor	8								16	$ 2,833
Prepare Conformed Construction Documents: Submit 1 - PDF, 5 - 11"x17" Plans (100 sheets); 1 - PDF and 3 - Specifications (900 sheets)	2	4		8					24	$ 4,111
Review Submittals (~~125 assumed~~)(40 Assumed)	20	40							120	$ 22,201
Respond to Contr. RFIs (Assume 20)	20	20							64	$ 12,550
Coordination of Construction Related Challenges	8	4							32	$ 6,633
Meeting and Site Visits									0	$ -
Pre-Construction Conference	2	4							18	$ 3,548
Bi-Weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (24 total)	36	48							120	$ 22,532
Site Visits (10 total) Including documentation, agendas, meeting minutes and follow up time. 2 hours per visit.	20	20							90	$ 17,561
Misc. Project Review and Coordination Meetings	8	8							30	$ 5,927
Substantial Completion Meeting	2	2							10	$ 1,981
Final Completion Meeting	2	2							10	$ 1,981
Testing and Start-Up Meeting	2	2							10	$ 1,981
1-Year Warranty Inspection and Follow Up Visit	2								4	$ 708
Prepare Draft/Final Record Drawings (Electronic)									0	$ -
Supplemental Services									0	$ -
Supplemental Technical Services	240	260	80	80	100	40	70	40	4,580	$ 883,498
Total Hours / Quantity	**962**	**1,182**	**304**	**464**	**150**	**104**	**102**	**66**	**12,697**	
Total Effort	**$ 175,976**	**$ 193,540**	**$ 54,841**	**$ 67,724**	**$ 37,000**	**$ 21,819**	**$ 18,604**	**$ 8,823**		**$ 2,376,264**

City of San Marcos LS 24 Upgrades and Package Wastewater Treatment Plant 10/9/2023 Detailed Cost Breakdown	Project Fee Summary	
	Basic Services	1,642,093
	Supplemental Services	953,778
	Total Project	2,595,871

Pro

	Expenses							
Task Description	Tech Charge	Miles	Meals	Hotel	B&W (sheet)	Binding (each)	Other	Total Expense Effort
Project Level Management & Quality Assurance	0							$ -
Internal Kickoff Meeting	48							$ 408
External Kickoff Meeting	20	16						$ 180
Periodic Internal Meetings (12 Month Duration)	190							$ 1,615
Periodic Client Meetings (Bi-Weekly x 12 Month Duration)	64							$ 544
External Stakeholder Meetings	18	40						$ 179
Coordination with PDB Team (up to 6 Mtgs)	72							$ 612
Maintain and Monitor Scope / Schedule / Budget (28 months)	58							$ 493
One Page Reports & Periodic Client Communications (28 months)	44							$ 374
Corporate Support (Scheduler)	10							$ 85
Corporate Support (Operations Analyst, Accounting Specialist, Contract Administrator) (28 months)	28							$ 238
Project Scoping, Preparation and Setup	156							$ 1,326
Project Closeout	9							$ 77
Contract Preparation for Subconsultants	8							$ 68
Maintain Project Decision/Issues Log	26							$ 221
Prepare and Maintain Entity/Utility Coordination Log	18							$ 153
Develop/Maintain QA Plan, QA Reviews	14							$ 119
Senior Advisor	8							$ 68
Flow Projection and Hydraulic Analysis	0							$ -
Development Projections	24							$ 204
Capacity Evaluation and Improvement Triggers	72							$ 612
Improvement Alternatives	24							$ 204
Prepare Draft and Final Technical Memorandum	56							$ 476
Preliminary Engineering	0							$ -
Bid Package 1 - LS 24 Upgrades	0							$ -
Hydraulics Analysis	30							$ 255
Pump Sizing	29							$ 247
Electrical Evaluation & Improvements	38							$ 323
AACE Class 4 OPCC	34							$ 289
Prepare Draft and Final Technical Memorandum	72							$ 612
Bid Package 2 - Temporary WWTP	0							$ -
Develop Design Basis & Alternatives Analysis	112							$ 952
Prepare Draft and Final Technical Memorandum	270							$ 2,295
AACE Class 4 OPCC	72							$ 612
Receiving Stream Flood and Erosion Assessment	0							$ -
Data Collection & Field Work	28	160					600	$ 1,003
Prepare Draft and Final Technical Memorandum	142							$ 1,207
36" Gravity Interceptor - Routing Study	0							$ -
Field Survey and Coordination	8							$ 68
Route Study and Plan & Profile Schematic Exhibits	162							$ 1,377
Class 4 OPCC	10							$ 85
Prepare Draft and Final Technical Memorandum	30							$ 255
Develop Exhibits and Tracking for Easements and Metes and Bounds	16							$ 136
Proposed Easements (up to 4) + Coordination and CAD Verification	34							$ 289
Preliminary Engineering Review Workshop	16	40					100	$ 272
30% Design (Bid Package 1 - LS 24 Upgrades)	0							$ -
Site Visit(s)	14	40						$ 145
Review of Geotechnical Data & Record Data	12							$ 102
Field Survey and Coordination	8	100					100	$ 244
Utility Coordination/Meetings with Stakeholders	13							$ 111
Hydraulics Analysis	9							$ 77
Existing Force Main Transient Analysis	44							$ 374
30% Design Plans	240						100	$ 2,150
Cost Estimating	34							$ 289
30% Design Submittal to Client	0							$ -
Pre-Submittal Coordination Set and Review	8							$ 68
Submittal Preparation for QC	16							$ 136
Quality Control Review by FNI	20							$ 170
Address Comments and Submit Draft to City	30							$ 255
30% Design Workshop, including Meeting Materials & Minutes	16	40						$ 162
90% Design (Bid Package 1 - LS 24 Upgrades)	0							$ -
Utility Coordination/Meetings with Stakeholders	17							$ 145
90% Design Plans	284						100	$ 2,524
90% Project Specifications	100							$ 850
Cost Estimating	29							$ 247
90% Submittal to Client	0							$ -
Pre-Submittal Coordination Set and Review	10							$ 85
Submittal Preparation for QC	10							$ 85
Quality Control Review by FNI	30							$ 255

City of San Marcos LS 24 Upgrades and Package Wastewater Treatment Plant 10/9/2023 Detailed Cost Breakdown	Project Fee Summary	
	Basic Services	1,642,093
	Supplemental Services	953,778
	Total Project	2,595,871

Pro

	Expenses							
Task Description	Tech Charge	Miles	Meals	Hotel	B&W (sheet)	Binding (each)	Other	Total Expense Effort
Address Comments and Submit Draft to City	38							$ 323
90% Design Workshop, including Meeting Materials & Minutes	16	40						$ 162
100% Design (Bid Package 1 - LS 24 Upgrades)	0							$ -
TCEQ and Utility Permitting/Coordination	8							$ 68
100% Design Plans	168							$ 1,428
100% Project Specifications	72							$ 612
Cost Estimating	24							$ 204
100% Signed and Sealed Submittal	40				1,650	10		$ 508
Bid Phase (Bid Package 1 - LS 24 Upgrades)	0							$ -
Pre-Bid Meeting and Preparation	5							$ 43
Attend Bid Opening	4	12						$ 42
Prepare Addenda	15							$ 128
Prepare Cost Evaluation Letter and RoA Letter	4							$ 34
Construction Phase (Bid Package 1 - LS 24 Upgrades)	0							$ -
General Coordination w/ City & Contractor	4						200	$ 254
Prepare Conformed Construction Documents: Submit 1 - PDF, 5 - 11"x17" Plans (30 sheets); 1 - PDF and 3 - Specifications (300 sheets)	36				1,050	8		$ 413
Review Submittals	72							$ 612
Review Lab, Shop & Mill Test Rpts	12							$ 102
Review O&M Manual & Revise Specs as Necessary	8							$ 68
Respond to Contr. RFIs (Assume 5)	38							$ 323
Review Alterations. Prepare RFPs, COs - 3 total	36							$ 306
Coordination of Construction Related Challenges	20							$ 170
Meeting and Site Visits	0							$ -
Pre-Construction Conference	6	12						$ 59
Construction Meetings via Video-Conference; including agenda and meeting minutes (4 total)	20							$ 170
Site Visits (2 total) Including documentation, agendas, meeting minutes and follow up time. 2 hours per visit.	18	48						$ 184
Substantial Completion Meeting	9	24						$ 92
Final Completion Meeting	5	12						$ 50
Testing and Start-Up Meeting	10	12						$ 93
1-Year Warranty Inspection and Follow Up Visit	5	24						$ 58
Certification of Project Construction & TCEQ Coordination	2							$ 17
Record Drawings (Electronic)	37							$ 315
30% Design (Bid Package 2 - Package WWTP)	0							$ -
Site Visit(s)	16	40						$ 162
Utility Coordination/Meetings with Stakeholders	8							$ 68
Develop Scope for Geotechnical Engineering & QC	22							$ 187
Field Survey and Coordination	52	200					300	$ 903
Internal Coordination Meetings (8)	52							$ 442
30% Design Plans	621							$ 5,279
30% Specifications	127							$ 1,080
Cost Estimating	64							$ 544
Stormwater/Drainage Design	50							$ 425
Hydrologic & Hydraulic Impact Assessment & Memo	92							$ 782
Erosion Hazard Zone Development	18							$ 153
Environmental and Cultural Coordination	95	1,500	250	400				$ 2,505
Draft Environmental Memorandum	64							$ 544
30% Design Submittal to Client	0							$ -
Pre-Submittal Coordination Set and Review	42							$ 357
Submittal Preparation for QC	20							$ 170
Quality Control Review by FNI	64							$ 544
Address Comments and Submit Draft to City	83							$ 706
30% Design Workshop, including Meeting Materials & Minutes	34	40						$ 315
TPDES Permitting (Coordination with Developer's Permit Consultant)	0							$ -
Coordination Meetings (2)	16							$ 136
Provide Information for Inclusion in Permit App	40							$ 340
Address Q/A	14							$ 119
90% Design (Bid Package 2 - Package WWTP)	0							$ -
Utility Coordination/Meetings with Stakeholders	28							$ 238
Update Hydrologic & Hydraulic Impact Assessment & Memo	48							$ 408
Prepare SWPPP	70							$ 595
Prepare Floodplain Development Permit & Watershed Protection Plan Permits	96							$ 816
Site Preparation Permit	48							$ 408
90% Design Plans	830						200	$ 7,275
90% Project Specifications	182							$ 1,547
Cost Estimating	67							$ 570

City of San Marcos
LS 24 Upgrades and Package Wastewater Treatment Plant
10/9/2023
Detailed Cost Breakdown

Project Fee Summary	
Basic Services	1,642,093
Supplemental Services	953,778
Total Project	2,595,871

Pro

	Expenses							
Task Description	Tech Charge	Miles	Meals	Hotel	B&W (sheet)	Binding (each)	Other	**Total Expense Effort**
Internal Coordination Meetings (8)	52							$ 442
90% Design Submittal to Client	0							$ -
Pre-Submittal Coordination Set and Review	30							$ 255
Submittal Preparation for QC	42							$ 357
Quality Control Review by FNI	56							$ 476
Address Comments and Submit Draft to City	104							$ 884
90% Design Workshop, including Meeting Materials & Minutes	34	50						$ 322
100% Design (Bid Package 2 - Package WWTP)	0							$ -
TCEQ and Utility Permitting/Coordination	18							$ 153
100% Design Plans	256							$ 2,176
100% Project Specifications	76							$ 646
Cost Estimating	52							$ 442
100% Signed and Sealed Submittal	68				5,000	10		$ 1,081
Bid Phase (Bid Package 2 - Package WWTP)	0							$ -
Prepare Pre-Bid Presentation	11							$ 94
Prepare Agenda and Attend Pre-Bid Meeting	15	12					200	$ 355
Attend Bid Opening	1	12						$ 16
Prepare Addenda	38							$ 323
Prepare Cost Evaluation Letter and RoA Letter	7							$ 60
Construction Phase (Bid Package 2 - Package WWTP)	0							$ -
General Coordination w/ City & Contractor	16						300	$ 466
Prepare Conformed Construction Documents: Submit 1 - PDF, 5 - 11"x17" Plans (100 sheets); 1 - PDF and 3 - Specifications (900 sheets)	24				3,200	8		$ 526
Review Submittals (~~125 assumed~~)(40 Assumed)	120							$ 1,020
Respond to Contr. RFIs (Assume 20)	64							$ 544
Coordination of Construction Related Challenges	32							$ 272
Meeting and Site Visits	0							$ -
Pre-Construction Conference	18	12						$ 161
Bi-Weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (24 total)	120							$ 1,020
Site Visits (10 total) Including documentation, agendas, meeting minutes and follow up time. 2 hours per visit.	90	120						$ 844
Misc. Project Review and Coordination Meetings	30	120						$ 334
Substantial Completion Meeting	10	24						$ 101
Final Completion Meeting	10	24						$ 101
Testing and Start-Up Meeting	10	24						$ 101
1-Year Warranty Inspection and Follow Up Visit	4	24						$ 50
Prepare Draft/Final Record Drawings (Electronic)	0							$ -
Supplemental Services	0							$ -
Supplemental Technical Services	4,580							$ 38,930
Total Hours / Quantity	**12,697**	**2,822**	**250**	**400**	**10,900**	**36**	**2,200**	
Total Effort	**$ 107,925**	**$ 1,848**	**$ 275**	**$ 440**	**$ 1,090**	**$ 9**	**$ 2,420**	**$ 114,007**

City of San Marcos LS 24 Upgrades and Package Wastewater Treatment Plant 10/9/2023 Detailed Cost Breakdown	ject Fee Summary Basic Services Supplemental S Total Project

	Subconsultants		Total
Task Description	Baseline	**Total Sub Effort**	**Total Effort**
Project Level Management & Quality Assurance		$ -	$ -
Internal Kickoff Meeting		$ -	$ 10,303
External Kickoff Meeting		$ -	$ 4,340
Periodic Internal Meetings (12 Month Duration)		$ -	$ 39,717
Periodic Client Meetings (Bi-Weekly x 12 Month Duration)		$ -	$ 13,161
External Stakeholder Meetings		$ -	$ 3,860
Coordination with PDB Team (up to 6 Mtgs)		$ -	$ 14,555
Maintain and Monitor Scope / Schedule / Budget (28 months)		$ -	$ 12,218
One Page Reports & Periodic Client Communications (28 months)		$ -	$ 9,252
Corporate Support (Scheduler)		$ -	$ 1,713
Corporate Support (Operations Analyst, Accounting Specialist, Contract Administrator) (28 months)		$ -	$ 5,091
Project Scoping, Preparation and Setup		$ -	$ 34,246
Project Closeout		$ -	$ 1,809
Contract Preparation for Subconsultants		$ -	$ 1,505
Maintain Project Decision/Issues Log		$ -	$ 5,038
Prepare and Maintain Entity/Utility Coordination Log		$ -	$ 3,668
Develop/Maintain QA Plan, QA Reviews		$ -	$ 2,791
Senior Advisor		$ -	$ 1,940
Flow Projection and Hydraulic Analysis		$ -	$ -
Development Projections		$ -	$ 5,753
Capacity Evaluation and Improvement Triggers		$ -	$ 16,424
Improvement Alternatives		$ -	$ 5,753
Prepare Draft and Final Technical Memorandum		$ -	$ 13,239
Preliminary Engineering		$ -	$ -
Bid Package 1 - LS 24 Upgrades		$ -	$ -
Hydraulics Analysis		$ -	$ 5,428
Pump Sizing		$ -	$ 5,340
Electrical Evaluation & Improvements		$ -	$ 7,965
AACE Class 4 OPCC		$ -	$ 6,525
Prepare Draft and Final Technical Memorandum		$ -	$ 13,780
Bid Package 2 - Temporary WWTP		$ -	$ -
Develop Design Basis & Alternatives Analysis		$ -	$ 21,660
Prepare Draft and Final Technical Memorandum		$ -	$ 51,341
AACE Class 4 OPCC		$ -	$ 13,866
Receiving Stream Flood and Erosion Assessment		$ -	$ -
Data Collection & Field Work		$ -	$ 7,064
Prepare Draft and Final Technical Memorandum		$ -	$ 28,584
36" Gravity Interceptor - Routing Study		$ -	$ -
Field Survey and Coordination	31,000	$ 34,100	$ 35,532
Route Study and Plan & Profile Schematic Exhibits		$ -	$ 27,550
Class 4 OPCC		$ -	$ 1,809
Prepare Draft and Final Technical Memorandum		$ -	$ 5,480
Develop Exhibits and Tracking for Easements and Metes and Bounds		$ -	$ 2,830
Proposed Easements (up to 4) + Coordination and CAD Verification	10,500	$ 11,550	$ 17,623
Preliminary Engineering Review Workshop		$ -	$ 3,419
30% Design (Bid Package 1 - LS 24 Upgrades)		$ -	$ -
Site Visit(s)		$ -	$ 2,932
Review of Geotechnical Data & Record Data		$ -	$ 2,382
Field Survey and Coordination	8,000	$ 8,800	$ 10,375
Utility Coordination/Meetings with Stakeholders		$ -	$ 2,654
Hydraulics Analysis		$ -	$ 1,684
Existing Force Main Transient Analysis		$ -	$ 8,436
30% Design Plans		$ -	$ 42,290
Cost Estimating		$ -	$ 6,323
30% Design Submittal to Client		$ -	$ -
Pre-Submittal Coordination Set and Review		$ -	$ 1,432
Submittal Preparation for QC		$ -	$ 2,865
Quality Control Review by FNI		$ -	$ 5,312
Address Comments and Submit Draft to City		$ -	$ 5,465
30% Design Workshop, including Meeting Materials & Minutes		$ -	$ 3,347
90% Design (Bid Package 1 - LS 24 Upgrades)		$ -	$ -
Utility Coordination/Meetings with Stakeholders		$ -	$ 3,497
90% Design Plans		$ -	$ 50,262
90% Project Specifications		$ -	$ 18,898
Cost Estimating		$ -	$ 5,519
90% Submittal to Client		$ -	$ -
Pre-Submittal Coordination Set and Review		$ -	$ 1,772
Submittal Preparation for QC		$ -	$ 1,772
Quality Control Review by FNI		$ -	$ 7,595

City of San Marcos LS 24 Upgrades and Package Wastewater Treatment Plant 10/9/2023 Detailed Cost Breakdown	ject Fee Summary Basic Services Supplemental S Total Project

	Subconsultants		Total
Task Description	Baseline	**Total Sub Effort**	**Total Effort**
Address Comments and Submit Draft to City		$ -	$ 6,933
90% Design Workshop, including Meeting Materials & Minutes		$ -	$ 3,182
100% Design (Bid Package 1 - LS 24 Upgrades)		$ -	$ -
TCEQ and Utility Permitting/Coordination		$ -	$ 1,432
100% Design Plans		$ -	$ 31,126
100% Project Specifications		$ -	$ 13,780
Cost Estimating		$ -	$ 4,626
100% Signed and Sealed Submittal		$ -	$ 6,980
Bid Phase (Bid Package 1 - LS 24 Upgrades)		$ -	$ -
Pre-Bid Meeting and Preparation		$ -	$ 1,005
Attend Bid Opening		$ -	$ 751
Prepare Addenda		$ -	$ 2,993
Prepare Cost Evaluation Letter and RoA Letter		$ -	$ 744
Construction Phase (Bid Package 1 - LS 24 Upgrades)		$ -	$ -
General Coordination w/ City & Contractor		$ -	$ 964
Prepare Conformed Construction Documents: Submit 1 - PDF, 5 - 11"x17" Plans (30 sheets); 1 - PDF and 3 - Specifications (300 sheets)		$ -	$ 6,637
Review Submittals		$ -	$ 14,394
Review Lab, Shop & Mill Test Rpts		$ -	$ 2,231
Review O&M Manual & Revise Specs as Necessary		$ -	$ 1,600
Respond to Contr. RFIs (Assume 5)		$ -	$ 7,472
Review Alterations. Prepare RFPs, COs - 3 total		$ -	$ 6,947
Coordination of Construction Related Challenges		$ -	$ 4,185
Meeting and Site Visits		$ -	$ -
Pre-Construction Conference		$ -	$ 1,089
Construction Meetings via Video-Conference; including agenda and meeting minutes (4 total)		$ -	$ 3,834
Site Visits (2 total) Including documentation, agendas, meeting minutes and follow up time. 2 hours per visit.		$ -	$ 3,672
Substantial Completion Meeting		$ -	$ 1,869
Final Completion Meeting		$ -	$ 986
Testing and Start-Up Meeting		$ -	$ 2,057
1-Year Warranty Inspection and Follow Up Visit		$ -	$ 1,079
Certification of Project Construction & TCEQ Coordination		$ -	$ 372
Record Drawings (Electronic)		$ -	$ 6,735
30% Design (Bid Package 2 - Package WWTP)		$ -	$ -
Site Visit(s)		$ -	$ 3,611
Utility Coordination/Meetings with Stakeholders		$ -	$ 1,898
Develop Scope for Geotechnical Engineering & QC		$ -	$ 4,707
Field Survey and Coordination	18,000	$ 19,800	$ 28,969
Internal Coordination Meetings (8)		$ -	$ 11,158
30% Design Plans		$ -	$ 112,617
30% Specifications		$ -	$ 23,733
Cost Estimating		$ -	$ 12,200
Stormwater/Drainage Design		$ -	$ 9,386
Hydrologic & Hydraulic Impact Assessment & Memo		$ -	$ 19,348
Erosion Hazard Zone Development		$ -	$ 3,585
Environmental and Cultural Coordination		$ -	$ 17,721
Draft Environmental Memorandum		$ -	$ 10,651
30% Design Submittal to Client		$ -	$ -
Pre-Submittal Coordination Set and Review		$ -	$ 7,664
Submittal Preparation for QC		$ -	$ 3,406
Quality Control Review by FNI		$ -	$ 15,853
Address Comments and Submit Draft to City		$ -	$ 15,068
30% Design Workshop, including Meeting Materials & Minutes		$ -	$ 6,942
TPDES Permitting (Coordination with Developer's Permit Consultant)		$ -	$ -
Coordination Meetings (2)		$ -	$ 3,518
Provide Information for Inclusion in Permit App		$ -	$ 7,560
Address Q/A		$ -	$ 2,946
90% Design (Bid Package 2 - Package WWTP)		$ -	$ -
Utility Coordination/Meetings with Stakeholders		$ -	$ 5,696
Update Hydrologic & Hydraulic Impact Assessment & Memo		$ -	$ 9,793
Prepare SWPPP		$ -	$ 11,898
Prepare Floodplain Development Permit & Watershed Protection Plan Permits		$ -	$ 17,743
Site Preparation Permit		$ -	$ 9,084
90% Design Plans		$ -	$ 150,685
90% Project Specifications		$ -	$ 34,839
Cost Estimating		$ -	$ 12,904

City of San Marcos LS 24 Upgrades and Package Wastewater Treatment Plant 10/9/2023 Detailed Cost Breakdown	ject Fee Summary Basic Services Supplemental S Total Project

	Subconsultants		Total
Task Description	Baseline	**Total Sub Effort**	**Total Effort**
Internal Coordination Meetings (8)		$ -	$ 10,717
90% Design Submittal to Client		$ -	$ -
Pre-Submittal Coordination Set and Review		$ -	$ 5,553
Submittal Preparation for QC		$ -	$ 7,385
Quality Control Review by FNI		$ -	$ 13,979
Address Comments and Submit Draft to City		$ -	$ 19,454
90% Design Workshop, including Meeting Materials & Minutes		$ -	$ 7,076
100% Design (Bid Package 2 - Package WWTP)		$ -	$ -
TCEQ and Utility Permitting/Coordination		$ -	$ 3,419
100% Design Plans		$ -	$ 49,241
100% Project Specifications		$ -	$ 15,062
Cost Estimating		$ -	$ 10,382
100% Signed and Sealed Submittal		$ -	$ 13,582
Bid Phase (Bid Package 2 - Package WWTP)		$ -	$ -
Prepare Pre-Bid Presentation		$ -	$ 2,176
Prepare Agenda and Attend Pre-Bid Meeting		$ -	$ 3,240
Attend Bid Opening		$ -	$ 203
Prepare Addenda		$ -	$ 7,299
Prepare Cost Evaluation Letter and RoA Letter		$ -	$ 1,393
Construction Phase (Bid Package 2 - Package WWTP)		$ -	$ -
General Coordination w/ City & Contractor		$ -	$ 3,299
Prepare Conformed Construction Documents: Submit 1 - PDF, 5 - 11"x17" Plans (100 sheets); 1 - PDF and 3 - Specifications (900 sheets)		$ -	$ 4,637
Review Submittals (~~125 assumed~~)(40 Assumed)		$ -	$ 23,221
Respond to Contr. RFIs (Assume 20)		$ -	$ 13,094
Coordination of Construction Related Challenges		$ -	$ 6,905
Meeting and Site Visits		$ -	$ -
Pre-Construction Conference		$ -	$ 3,709
Bi-Weekly Construction Meetings via Video-Conference; including agenda and meeting minutes (24 total)		$ -	$ 23,552
Site Visits (10 total) Including documentation, agendas, meeting minutes and follow up time. 2 hours per visit.		$ -	$ 18,405
Misc. Project Review and Coordination Meetings		$ -	$ 6,260
Substantial Completion Meeting		$ -	$ 2,082
Final Completion Meeting		$ -	$ 2,082
Testing and Start-Up Meeting		$ -	$ 2,082
1-Year Warranty Inspection and Follow Up Visit		$ -	$ 758
Prepare Draft/Final Record Drawings (Electronic)		$ -	$ -
Supplemental Services		$ -	$ -
Supplemental Technical Services	28,500	$ 31,350	$ 953,778
Total Hours / Quantity	**$ 96,000**		
Total Effort	**$ 105,600**	**$ 105,600**	**$ 2,595,871**

Exhibit 2
Fee Summary
LS 24 Upgrades and Package WWTP

Task	Total Hours	NTE Fee
Project Level Management and Quality Assurance	261	$ 67,734
Flow Projection and Hydraulic Analysis	176	$ 41,170
Receiving Stream Flood and Erosion Assessment	170	$ 35,648
36" Gravity Interceptor - Routing Study & Easements	260	$ 90,824
Preliminary Engineering review Workshop	16	$ 3,419
TPDES Permitting (Coordination with Developer)	70	$ 14,023
Bid Package 1 - LS 24 Upgrades		**$ 389,960**
Project Management	261	$ 26,433
Preliminary Engineering	203	$ 39,039
30% Design	464	$ 95,498
90% Design	534	$ 99,432
100% Design	312	$ 57,946
Bid Phase	28	$ 5,493
Construction Phase	338	$ 66,121
Bid Package 2 - Package WWTP		**$ 999,313**
Project Management	269	$ 71,039
Preliminary Engineering	454	$ 86,868
30% Design	1,524	$ 308,517
90% Design	1,687	$ 316,806
100% Design	470	$ 91,685
Bid Phase	72	$ 14,311
Construction Phase	548	$ 110,087
	Subtotal	$ 1,642,093
Supplemental Services		$ 953,778
Total:	8117	**$ 2,595,871**

COMPENSATION

Compensation to FNI for Basic Services in Exhibit 1 shall be the not to exceed amount of One Million Six Hundred Forty Two Thousand Ninety Three Dollars ($1,642,093).

Compensation to FNI for Supplemental Services in Exhibit 1 shall be computed on the basis of the following Schedule of Charges, but shall not exceed Nine Hundred Fifty Three Thousand Seven Hundred Seventy Eight Dollars ($953,778).

If FNI sees the Scope of Services changing so that Additional Services are needed, including but not limited to those services described as Additional Services in Exhibit 1, FNI will notify OWNER for OWNER's approval before proceeding. Additional Services shall be computed based on the following Schedule of Charges.

Position	**Hourly Rate**
Professional 1	127
Professional 2	155
Professional 3	173
Professional 4	200
Professional 5	234
Professional 6	267
Construction Manager 1	110
Construction Manager 2	136
Construction Manager 3	148
Construction Manager 4	185
Construction Manager 5	223
Construction Manager 6	254
Construction Representative 1	98
Construction Representative 2	110
Construction Representative 3	136
Construction Representative 4	148
CAD Technician/Designer 1	108
CAD Technician/Designer 2	139
CAD Technician/Designer 3	172
Corporate Project Support 1	103
Corporate Project Support 2	124
Corporate Project Support 3	165
Intern / Coop	63
Senior Advisor	175

Rates for In-House Services and Equipment

Mileage

Standard IRS Rates

Technology Charge

$8.50 per hour

Bulk Printing and Reproduction

	B&W	Color
Small Format (per copy)	$0.10	$0.25
Large Format (per sq. ft.)		
Bond	$0.25	$0.75
Glossy / Mylar	$0.75	$1.25
Vinyl / Adhesive	$1.50	$2.00
Mounting (per sq. ft.)	$2.00	
Binding (per binding)	$0.25	

Equipment

Valve Crew Vehicle (hour)		$75
Pressure Data Logger (each)		$200
Water Quality Meter (per day)		$100
Microscope (each)		$150
Pressure Recorder (per day)		$100
Ultrasonic Thickness Guage (per day)		$275
Coating Inspection Kit (per day)		$275
Flushing / Cfactor (each)		$500
Backpack Electrofisher (each)		$1,000
	Survey Grade	Standard
Drone (per day)	$200	$100
GPS (per day)	$150	$50

OTHER DIRECT EXPENSES:

Other direct expenses are reimbursed at actual cost times a multiplier of 1.10. They include outside printing and reproduction expense, communication expense, travel, transportation and subsistence away from the FNI office. For other miscellaneous expenses directly related to the work, including costs of laboratory analysis, test, and other work required to be done by independent persons other than staff members, these services will be billed at a cost times a multipler of 1.10. For Resident Representative services performed by non-FNI employees and CAD services performed In-house by non-FNI employees where FNI provides workspace and equipment to perform such services, these services will be billed at cost times a multiplier of 2.0. This markup approximates the cost to FNI if an FNI employee was performing the same or similar services.

These ranges and/or rates will be adjusted annually in February. Last updated 2023.

EXHIBIT 3 – Project Schedule

The project schedules will be determined on a “per Project” bases.

EXHIBIT " 4 "
AUTHORIZATION OF CHANGE IN SERVICE

CONTRACT NAME:		**NUMBER:**	
CONTRACTOR:			
ORIG. CONTRACT DATE:		**RESOLUTION NO:**	
CITY REPRESENTATIVE:		**DEPT:**	
DATE:		**ACIS NO.:**	

DESCRIPTION OF WORK TO BE ADDED TO OR DELETED FROM SCOPE OF SERVICES:

Original Contract Amount:		$
Previous **Increases/Decreases** in Contact Amount:		$
CURRENT CONTRACT AMOUNT:		$
This **Increase/Decrease** in Contract Amount:		$
REVISED CONTRACT AMOUNT:		$

CONTRACTOR:

Signature _____ Date _____

Print Full Name / Title (if not in individual capacity) _____

CITY:

Signature _____ Date _____

Print Name / Title _____

City Department Use Only Below This Line (PM, POC, etc.).

Account Number(s):	Amount	Date
#	$	
#	$	
#	$	

EXHIBIT 5

City of San Marcos On-Call Agreement
Fund Allocation Request Form

[1]Fund Allocation Number: _____

Instructions for Use: This Form will be used to "assign" or allocate services for project scopes to approved firms through the related Master On-Call Agreement. Assigned services may NOT begin until this form is completed (front and back) with all signatures and a Purchase Order is issued by COSM.

Company Name: _____ Project Name: _____

Company PM: _____ On-Call Agreement Name: _____

On-Call Agreement #: _____

This Fund Allocation Form authorizes the Consultant (Firm) to provide the services described below in accordance with the Master On-Call Professional Services Agreement between the Consultant (Firm) and the City of San Marcos.

PROJECT DESCRIPTION:

SCOPE OF BASIC SERVICES:

This information must be completed prior to making the assignment/Fund Allocation:
***Fill out page 2 first for calculations.**

Original On-Call Agreement Amount:	$	
Change In Service (change order/amendments) to Date:	$	
Revised Agreement Amount:	$	0.00
Previous Fund Allocations Amount:	$	0.00
Released Purchase Order Funds:	$	0.00
Amount of this Request:	$	
Funds Remaining on On-Call Agreement:	$	0.00

_____

Requested By Date

Reviewed and Approved by:

_____

City Project Manager Date

_____

Director Date

Authorization to Proceed: Following receipt of COSM Purchase Order, the Consultant (Firm) is authorized to proceed with the Services described above.

For Internal Use Only. To be filled out by PM

Project	Fund	Phase	Amount

GL Account_____

rev 2/6/2020

Submit invoices via email to the City PM and copy kfoxworth@sanmarcostx.gov

Fund Allocation Backup

On-Call Agreement Name: ______________________
On-Call Agreement #: ______________________
Company Name: ______________________

[1]FA #	[2]Date Submitted	[3]Project Name	[4]Project Manager	[5]Allocated	[6]Closed By PM	[7]Total Paid	[8]Re-Allocated
			Total	*$* $ 0.00		*$* $ 0.00	*$* $ 0.00

Original Contract Amount	
Total Change In Service	
Revised Contract Amount	$ 0.00
Total Previously Allocated	$ 0.00
Total Released PO Funds	$ 0.00
Contract Balance	$ 0.00

Instructions

This spreadsheet will be maintained by the Consultant and submitted with each Fund Allocation (FA).

1	The first Fund Allocation (FA) on each contract will be number 1. The next will be number 2, and then number 3, etc. If during the design, the Project Manager determines that additional funds are needed on an existing FA, then the Consultant will keep the same FA number, but add a .1 to the number. For example; for FA 1, any additional FA on the same project will be 1.1, 1.2, 1.3, etc. For FA 2, any additional FA on the same project will be 2.1, 2.2, 2.3, etc.
2	Use the date on the Fund Allocation Request Form next to the "Requested By" signature block.
3	Use the Project Name on the Fund Allocation Request Form.
4	Use the City Project Manager on the Fund Allocation Request Form.
5	Use the "Amount Requested" on the Fund Allocation Request Form.
6	"Yes" Or "No" Only. The City PM will indicate if the FA is closed; the Consultant will check with the PM once the final payment is made on each FA.
7	Use the amount from the Final Invoice.
8	Re-Allocated = Allocated - Total Paid